

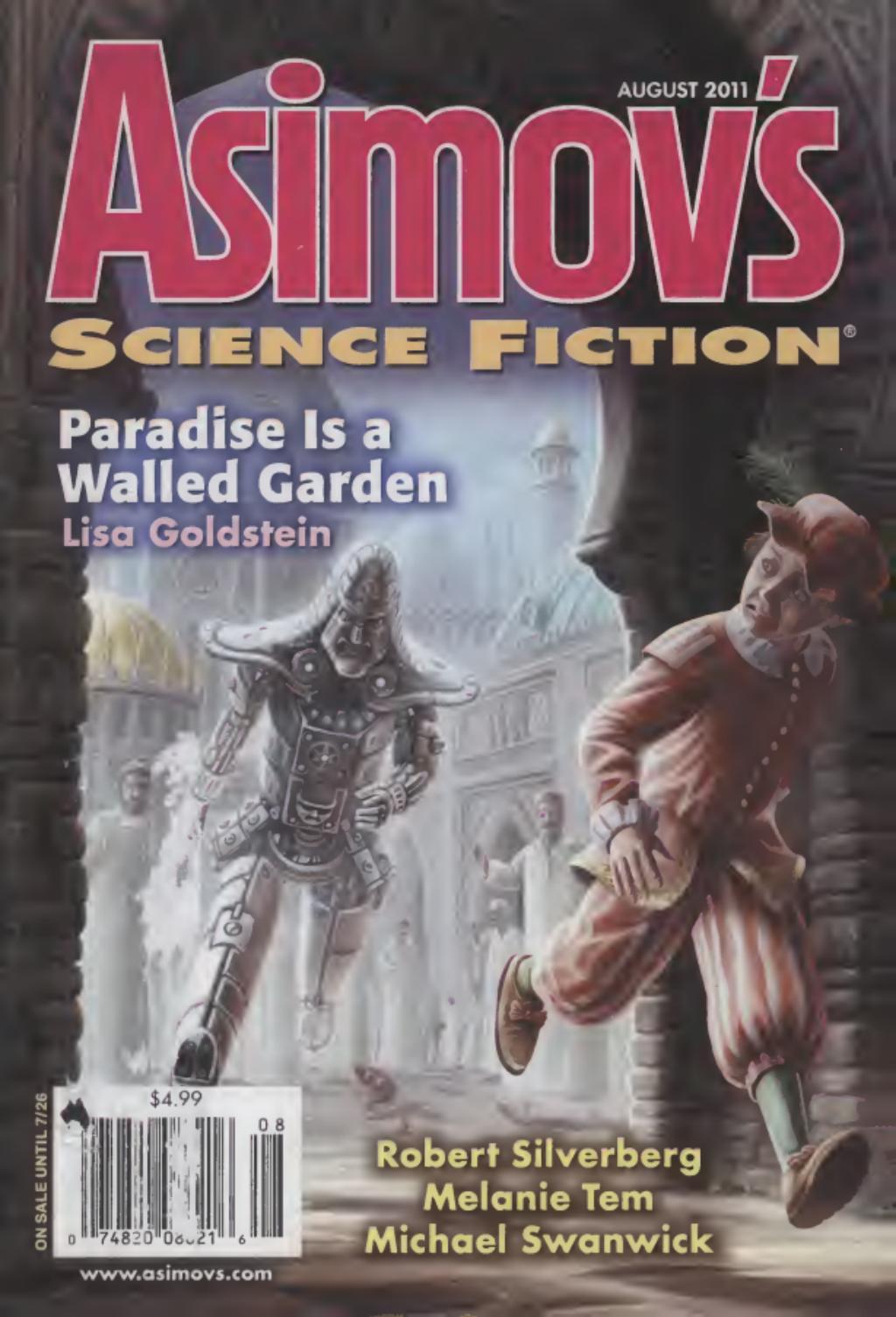
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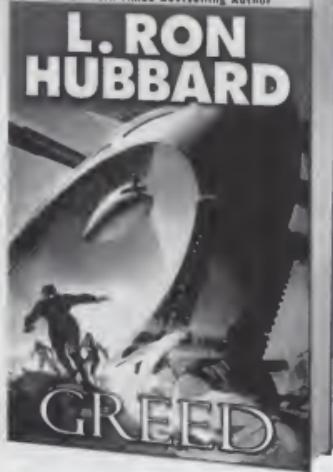
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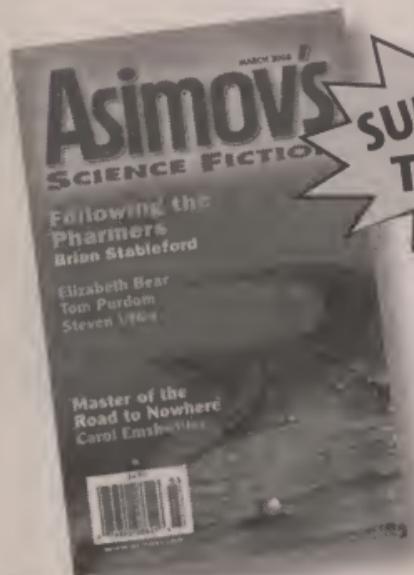
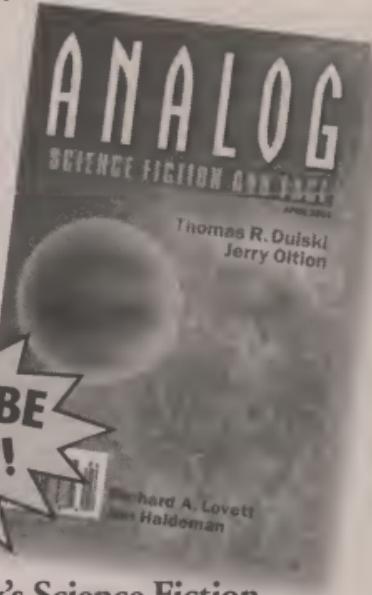
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# Asimov's SCIENCE FICTION

AUGUST 2011

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## THE 2011 DELL MAGAZINES AWARD

My co-judge Rick Wilber and I were exceptionally fortunate this year in that we had to choose the Dell Magazines Award for Undergraduate Excellence in Science Fiction and Fantasy Writing from an unusually large pool of talented authors. Due to all this talent, we ended up with the largest group of finalists in the award's history. We were even more fortunate that every one of our finalists chose to attend this year's International Conference on the Fantastic in the Arts in Orlando, Florida. The award, which includes a five hundred dollar first prize, is co-sponsored by Dell Magazines and the International Association for the Fantastic and is supported by the School of Mass Communications, University of South Florida. It is given out each year at the conference.

Although the award's outcome is determined via a blind read, we were pleased to discover that most of our finalists were familiar faces. Our winner, Seth Dickinson, who graduated from the University of Chicago last spring, had placed in the contest on two previous occasions. Seth has always been able to spin a hard science fiction tale and this year's excellent story about "The Immaculate Conception of Private Ritter" was exciting and engrossing. We're sure Seth has a strong career as a fiction writer ahead of him.

Our first-runner up, Amanda Olson of S. Olaf College, flew in from Scotland, where she is spending a year at the University of Aberdeen. Her bittersweet tale of "Aunt Victoria" made her a first-time finalist and she got to attend the conference with her close friend from first grade, and fellow finalist, Kendra Leigh Spalding. Kendra, a junior at the University of Minnesota and another first-timer, received an honorable mention for "Caveat."

The second runner-up certificate went to Eugenia Lily Yu of Princeton University. Although Lily received an honorable mention in last year's contest, this was her first chance to attend in person. It was a delight to meet her and to have a chance to read her story, "The Cartographer's Wasp and the Anarchist Bees." A revised version of the story sold to *Clarkesworld* soon after the conference. It was posted on their site in April.

Last year's winner, Rachel Sobel—a senior at the University of Washington (Seattle), was this year's third runner up with an intriguing tale that takes place "In the Time of the Drought."

Rick and I had had a previous chance to get to know many of this year's honorable mentions. Miah Saunders, a junior at High Point University in North Carolina, was last year's first runner-up. She received her award this year for a scary story about "Death's Lady." Lara Donnelly who, like Seth, had been a finalist on more than one occasion, received her award for the darkly amusing tale of "The Case of the Wayward Sister." Unlike last year, when she flew in from Ireland, Lara, a senior at Wright State University flew to the conference directly from Dayton, Ohio.

Last year's second runner-up, Rebecca McNulty, a junior at The College of New Jersey, returned to accept her award for a disturbing story about "The Little Man's Call." I was pleased that this time I didn't confuse her name even once with her good friend, Rachel Halpern's. Rachel is a junior at Grinnell College. She was on hand to receive her second honorable mention award, this time for a sharp look at "A Clarity of Mind."

In addition to the aforementioned Kendra, other honorable mentions who were new to the award and to the confer-



Photo credit: Bill Clement/Locus Publications

Left to right: Amanda Olson, Rick Wilber, Miah Saunders, Kendra Leigh Speedling, Lara Donnelly, Sarah Brand, Rachel Halpern, Rachel Sobel, Seth Dickinson, Eugenia Lily Yu, Rebecca McNulty, Tina Tseng, and Sheila Williams.

ence were Sara Brand of Vanderbilt University, who received her award for the thoughtful tale, "Perchance to Dream," and Tina Tseng of UCLA who received her award for a heart-breaking tale of "A Treatise on the Duality of Peace and Accomplishing a Rewarding Parent-Child Relationship Based Upon Mutual Respect and Love." We hope to see many of the new and returning contestants at next year's conference.

As usual, the students were warmly welcomed by a number of leading authors. On Friday night, they had dinner with conference guests of honor Connie Willis and Terry Bisson. We were joined at this meal by the always amazing Kit Reed and her husband Joe. The students also had a chance to spend time with Marie Brennan, Suzy McKee Charnas, Ted Chiang, Stephen R. Donaldson, Andy Duncan, Kathleen Ann Goonan, Nisi Shawl, Joe Haldeman, James Patrick Kelly, John Kessel, Patricia McKillip, Sandra McDonald, Rachel Swisky, Peter Straub, and many other writers.

**Editorial: The 2011 Dell Magazines Award**

You can visit with previous finalists and current writers at our Facebook site. Search for the **Dell Magazines Award** or go directly to <http://www.facebook.com/pages/manage/?#!/pages/Dell-Magazines-Award/177319923776>

We are actively looking for next year's winner. The deadline for submissions is Monday, January 2, 2012. All full-time undergraduate students at any accredited university or college are eligible.

Before entering the contest, contact Rick Wilber for more information, rules, and manuscript guidelines. He can be reached care of:

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Next year's winner will be announced at the 2012 Conference on the Fantastic, in the pages of *Asimov's Science Fiction* magazine, and on our website. ☐

## EARTH IS THE STRANGEST PLANET

One morning some fifty-five years ago I came into the office of John W. Campbell, Jr., the already legendary editor of *Astounding Science Fiction*, greatest of all SF magazines, and there, leaning against the wall behind his desk, was a new painting that cover artist Ed Emshwiller had just brought in.

"What do you think of it, Bob?" John asked. In his Socratic way he was always asking the visitors to his office for their opinions about this or that—even his newest and youngest regular contributor, which is what I was.

The painting puzzled me. At first glance it looked like a cheerful rural scene somewhere in New England or Kansas: a boy walking down a rutted dirt road with a fishing rod over his shoulder, a cow thrusting its head through a barbed-wire fence to slurp up some flowers by the roadside, a couple of birds standing in the path. At second glance I saw that it wasn't Kansas. The "cow" had a face like that of no cow ever seen on Earth, the "birds" looked more like little dinosaurs, and there were two crescent moons visible in the pleasant blue sky. I smiled. And then I took a third glance. There was a pelican sitting on one of the fence posts. "That isn't Earth," I said. "So what's that pelican doing there?"

"Well, don't you think pelicans are just as weird-looking as any extraterrestrial critter is likely to be?" said Campbell.

That painting is on the June 1958 issue of *Astounding*, probably pretty hard to find now. But the incident stayed in my mind, and, about twenty years later when I was editing anthologies, I did one called *Earth is the Strangest Planet*, with stories in it by Brian Aldiss, Harry Harrison, R.A. Lafferty, Avram Davidson, and assorted others, with this introductory statement of theme:

It is not hard to find wonders in science fiction, but mostly they are found in stories set in remote galaxies or in the vast reaches of the future. . . . But there are more real wonders in a puddle of muddy water than in a million imaginary galaxies, and the book you now hold in your hand is intended to demonstrate that. . . . Our inexhaustible, always surprising home world [is] the planet that gave the universe the stegosaurus, the kangaroo, the Venus flytrap, the pelican, the turtle, the lobster, and a billion other miracles, not the least of them the human imagination.

Science fiction writers have given us not only a legion of strange animals and landscapes, but also a panoply of bizarre cultures at least as odd, in their way, as the pelican and the stegosaurus are in theirs. But, as John Campbell pointed out to me that day long ago, sometimes the real world is every bit as strange as anything ever dreamed up by SF writers.

A few years ago, for example, I came across a novel called *Broken April*, by Ismael Kadare, which centers on the custom of blood feuds as practiced to this day among the clansmen of Albania's mountainous northern highlands. Kadare is one of the great novelists of our time, though it is his misfortune to write in Albanian, perhaps the most obscure European language. His work reaches us because he has a gifted translator in Paris who turns it into French, from which it can be translated—with considerable accuracy, apparently—into English. I've read half a dozen of his novels, one of which, *The Palace of Dreams*, qualifies as

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science fiction, or at least fantasy. (It is about bureaucrats in an empire much like that of the Ottomans whose task it is to sort and classify the dreams of all the citizens in the hope that they will find Master Dreams that provide clues to the destiny of the realm.)

In *Broken April*, the unlucky protagonist, Gjorg, becomes trapped in the traditional Albanian cycle of family feuds when his older brother is murdered. Gjorg, as the oldest surviving male of his family, has no choice but to seek out his brother's killer and shoot him—after which, he knows, he will be tracked and killed in turn by an avenger from the other man's family. This bleak and harrowing novel makes frequent reference to the *Kanun*, the Albanian code of customary law, which regulates not only the rules of feuds but just about every other aspect of life in the Albanian highlands. Gjorg must follow the *Kanun* at every step.

I thought for a time that the *Kanun* was fictional, an ingenious bit of background material invented by Ismael Kadare to provide the underpinning for his remarkable book. But not long ago I discovered that it really exists, and in fact has been translated into English and published by the Gjonlekaj Publishing Company of New York. I have a copy on my desk right now, a big red book called *Kanuni I Leke Dukagjinit*, "The Code of Leke Dukagjini."

It could easily be the code of laws of some extraterrestrial civilization. Albanians are human beings, of course—I have met a few, and I can attest to that—and their homeland is right in the middle of Europe, with Greece on one side and Montenegro, Kosovo, and Macedonia, three pieces of the former Yugoslavia, on the other, but their *Kanun*, conceived by the tribal leader Leke Dukagjini in the fifteenth century and compiled much later in written form by the

Franciscan monk Shtjefen Gjecov, is a book of twelve sections with 1,262 clauses that offers us a picture of a most unusual way of life that most of us can only regard as alien. It is of a level of strangeness that the most inventive of science fiction writers would be hard pressed to match.

Consider the rules of plundering, by which is meant mainly the stealing of sheep. "Plundering is avenged by plundering," we are told. "Plundering is not settled otherwise than by plundering in return or by guns. . . . For an act of plunder committed in the mountains the owner must have his livestock restored, but receives no other compensation. For an act of plunder committed in a sheepfold, the owner must have his livestock restored and a fine of five hundred *grosh* for the honor of the sheepfold." To which many other conditions are appended. "If the plunderer is supported by the village and the Banner, the person whose livestock has been plundered has the right to plunder the livestock of anyone in that village or Banner, in order to recover his honor and to be compensated for his own livestock. . . . The bellwether of the flock may not be taken as plunder. If the bell worn by the bellwether is taken as plunder, this act dishonors the entire flock and the sheepfold. The plunderer must pay a fine of five hundred *grosh* and may not take a single head of livestock." *Et cetera, et cetera.*

As for murder: "A murderer is a person who kills someone with his own hands. As soon as a murderer has killed someone, he must inform the family of the victim, in order that there should be no confusion regarding his identity. . . . The murderer, if he is able to do so himself, turns the victim over on his back. If he can, well and good; if not, he must tell the first person he meets to turn the victim over on his back and place his weapon near his head. . . . The murderer may not dare to take the victim's weapon. If he commits such a dishonorable act, he incurs two blood-feuds. . . . The murderer may move around at

night, but at the first light of day he must conceal himself."

The *Kanun* goes on to specify the elaborate rules under which a twenty-four-hour truce between the villages of the victim and the murderer is arranged so that the victim can be buried; the murderer is expected to attend the funeral and accompany the body to the cemetery and also to go to the wake, and he is protected during that time, though "if the murderer does not go to the funeral and the wake after the truce has been given, it is not considered dishonorable for the family of the victim to withdraw the truce, since the murderer has added insult to injury."

And then the feud begins: "Blood is Paid for with Blood," declares Chapter CXXVI of the tenth section of the *Kanun*. We are told that under the old *Kanun* only the murderer himself incurs the blood-feud, but the later *Kanun*—and this decree is the core of Kadare's novel—"extends the blood-feud to all males in the family of the murderer, even an infant in the cradle." Cousins, nephews—everyone is at risk as the feud unfolds, each side claiming a life in vengeance for the last life taken, though ultimately reconciliation can be achieved through the intervention of the parish priest or by the tribal chiefs. If such reconciliation is achieved, "the 'meal of the blood' occurs when the mediators of reconciliation of blood, together with some relatives, comrades, and friends of 'the owner of the blood' go to the house of the murderer to reconcile the blood and eat a meal to observe that reconciliation," after which the "owner of the blood" carves a cross on the door of the murderer's house, and—the final touch—"It is a law that the tool—the adze—with which the cross is made must be thrown over the roof of the murderer's house."

The *Kanun* in its current edition is a book of 269 large pages, with Albanian and English text on facing pages. It covers not only feuding and sheep-rustling but all other sources of conflict in tribal Albania. Chapter LVII of Section Four,

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SCIENCE FICTION

for instance, proclaims that "land boundaries are not movable." Boundary markers must be "large, towering rocks thrust into the earth and exposed above it." A special ceremony solemnizes the establishment of a boundary line, and it thereby is fixed for all time. "In the view of the *Kanun*, the bones of the dead and the boundary stone are equal. To move a boundary is like moving the bones of the dead." Once the final oath has been sworn, the clan elder places his hand on the boundary stone and declares, "If anyone moves this stone, may he be burdened with it in the next life." But there are consequences in this life, too: "He will be punished with dishonor and will also bear the cost of the damage that he caused by creating this discord. If a murder results from the mischief relating to the moved boundary, the person who caused the mischief must be fined one hundred sheep and one ox, and is executed by the village."

It's a fascinating document. I could quote from it all day: the regulations concerning trade, the sanctity of guests (you must avenge the murderer of your guest as though he were a member of your own family!), damage done by pigs, the laws of marriage and inheritance, and on and on and on. Any SF writer looking for ready-made rules for some alien culture could easily plunder it—without fear of incurring a feud—and find all the strange laws and customs anyone would need. But the *Kanun* is no alien artifact. It's a set of rules governing a very real community living in a tough, merciless environment right here on our planet, and, though obedience to it was severely punished by Albania's former Communist government, its use has been revived in the hill country in post-Soviet times, and there are people who live by it in this very century. Science fiction is, yes, a literature of imaginary wonders and marvels, and more power to it; but Earth itself, our far from prosaic native planet, serves up plenty of real ones of its own. ☺

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### WRITING LESSONS

#### *reading*

It's sad that I never really had the chance to read *Asimov's* the way you do, assuming, dear reader, that you harbor no secret dreams of publishing in these pages. When this magazine debuted in 1977, I was one year out of the **Clarion Writers Workshop** (<http://clarion.ucsd.edu>) and burning with ambition. Overjoyed to have a new market to conquer, I fell immediately to deconstructing *Asimov's* stories for content and craft, thinking that I might thus decode the secret editorial formula for selling here. Alas, it was a doomed enterprise, as any experienced hand could have told me, and I spent six years collecting rejection slips until **Shawna McCarthy** ([en.wikipedia.org/wiki/Shawna\\_McCarthy](en.wikipedia.org/wiki/Shawna_McCarthy)) took over as editor. But even now, I can't turn these pages without being puzzled by missed creative opportunities or astonished by clever new techniques that I need to steal study further.

I did not always read like a writer, and now I look back on those wonderful years of pure reading enjoyment with fondness and regret. It was my fate to catch the writing bug early, however; even in high school I dreamed that I might someday sell stories. Of course, I also dreamt of playing power forward for the **New York Knicks** (<nba.com/knicks>) and becoming an astronaut and of running for president — and we all know how those dreams worked out.

Clarion changed me forever as a reader and a writer. Back in January, I was reminded that it has had a similar effect on literally hundreds of my colleagues.

Clarion and its sister workshop, **Clarion West** (<clarionwest.org>), were in the midst of their application season and I decided to try to start an internet meme to promote the two programs. I posted "Five Things I Learned at Clarion" on my Facebook page and challenged Clarion grads from both programs to do the same. What followed was an outpouring of advice across the web that stunned me in its honesty and wisdom. I thought I'd share a bit of what they learned here, selecting just one "lesson" for each writer. Some of the Clarion grads you will already have heard of; some you will be hearing from shortly. One common theme to note is how often they are thinking of you, dear reader!

#### *learnings*

**Andy Duncan** (<beluthahatchie.blogspot.com>) I learned that reading my stuff aloud is a great revision technique, and a great test of whether it's finished. I learned this by reading aloud, to a blind classmate, my manuscripts in progress.

**Paul M. Berger** (<paulmberger.com>) Sometimes a nice complex sentence structure can feel so wrong it pulls the reader out of the story, even if it's grammatically correct.

**Megan Kurashige** (<immobileexplorations.blogspot.com>). If you smash apart the dull, chronological line of cause and effect and replace it with story, you can start stringing together the tiny, pinprick lights of theme into a narrative of meaning. You can also more effectively lure the reader into the character's skin.

**Ferrett Steinmetz** (<theferrett.livejournal.com>) You have to shoot high.

There are a thousand stories that are pretty good. That's not good enough. The kind of story you're looking to write is the story the reader is still musing upon in the bathtub three days later. That kind of tale is hard to create indeed, which is why selling a pro story is a real challenge.

**Ken Schneyer** <[ken\\_schneyer.livejournal.com](http://ken_schneyer.livejournal.com)> If there's no reason for the character to care about the outcome, then there's no reason for the reader to do so.

**Collin Piprell** <[collinpiprell.com](http://collinpiprell.com)> Ignorance can be a real virtue. Don't collect too much in the way of information and ideas before you begin writing. With academic theses, feature stories, and science fiction alike, it's often best to spin as much of the story as you can before you do most of your research. Ignorance simplifies things enormously, since you have fewer elements to synthesize from the outset. Wait till you've got the story up and staggering about before worrying too much about incorporating all the ideas in the world. It's easier to be selective, at that point, and much easier to organize all the ideas now that you have a basic framework. The storyline can always be revised in light of new information.

**Emily Jiang** <[emilyjiang.blogspot.com](http://emilyjiang.blogspot.com)> (Emily is a poet and wrote her Five Things in haiku)

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Transform your poems  
into arias, and sing.

If you've always lived in mainstream communities where you've been constantly told that you're a little weird, and suddenly you are surrounded by people who will actively debate with you on which is the better Star Trek series, quote Star Wars lines at you, and/or will totally sing Disney songs with you at the drop of a hat, it is an amazing feeling. The weirder the better.

**Sue Burke** <[mount-oregano.livejournal.com](http://mount-oregano.livejournal.com)> Only one miracle per story, and the first sentence should point to it.

**Kathleen Howard** <[strangeink.blogspot.com](http://strangeink.blogspot.com)> Writing is a job. Show up for work. When I taught this fall, three of my writer friends came in and guest-lectured for me. Every one of them was asked how they deal with writer's block. Every one of them answered: "Writing is my job. I don't get to have writer's block." If you're going to be a writer, in the words of **John Scalzi** <[whatever.scalzi.com](http://whatever.scalzi.com)> (teaching at Clarion this year), "find the time or don't." Don't wait until your life is awesome, or the muse visits, all smiles and seductions, or until you know what happens next. Put your butt in the chair and write.

**Theodora Goss** <[theodoragoss.com](http://theodoragoss.com)> When told that most aspiring writers won't make it, decide they're not talking about you.

**Damien Walter** <[damiengwalter.com](http://damiengwalter.com)> Your writing has as much depth as you do. It's not possible to reach beyond the emotional range of your own experience. You have to live fully and explore your humanity before you stand a chance of writing stories that help others do the same. That doesn't mean exploring unknown continents necessarily, it does mean exploring the unknown hidden in your everyday experience.

**Jason Erik Lundberg** <[jasonlundberg.net](http://jasonlundberg.net)> There is no secret handshake, only hard work and constant improvement.

**Leslie What** <[sff.net/people/leslie.what](http://sff.net/people/leslie.what)> If you are writing a plotted story, brainstorm three ways your story might end. Then write the fourth.

**Tim Pratt** <[timpratt.org](http://timpratt.org)> Trying to think about "plot" and "character" (and even setting!) in isolation isn't much

**READERS:** If you are having problems finding Asimov's *Science Fiction* at your favorite retailer, we want to help. First let the store manager know that you want the store to carry Asimov's. Then send us a letter or postcard telling us the full name and address of the store (with street name and number, if possible). Write to us at: *Asimov's Science Fiction*, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220. Thank you!

good. They rely on complex interactions and are inextricably entwined, and you can't change one without affecting the other(s). For example, once you really know a character, and understand what they'd do in a given situation, the working-out of the plot largely takes care of itself.

**Emily Mah Tippetts** <[emilymah.com](http://emilymah.com)> What is the difference between a science fiction writer and a large pizza? (A large pizza can feed a family of four.)

**Monica Byrne**: <[byrne.typepad.com](http://byrne.typepad.com)> Anger is useful. At last count, I've gotten about 240 rejections in the time since I left Clarion . . . along with six story sales, a grant, a full-scale play production, two residencies, and a major travel fellowship. Those artists you admire who seem to collect sales and prizes without effort? They work their asses off, and they get rejected all the time; or did, once. I still do, and every time I get a rejection I think, "Really? Really!?" and send it out again on a fresh wave of righteous anger.

**Cynthia Felice** <[travisheermann.com/blog/?p=179](http://travisheermann.com/blog/?p=179)> Start as close to the end as possible.

**Daniel Pinney** <[yourwordsmatter.wordpress.com](http://yourwordsmatter.wordpress.com)> One should never feel like they have to apologize because they want to write SF/F. It's as respectable a writerly ambition as it is to be the next Rick Moody or Ernest Hemingway. In fact, it might even be more respectable. In any event, though, it's okay to write this stuff. It's more than okay.

**Grá Linnaea** <[gralinnaea.com](http://gralinnaea.com)> There's a fine line between pushing yourself out of your comfort zone and pushing yourself to write stuff that doesn't excite you.

**Nicole Taylor** <[nicolemtaylor.wordpress.com](http://nicolemtaylor.wordpress.com)> No one is going to give you permission to be a writer. Don't wait for some magical time when you think you're old enough or have "earned it" or something. Write, send stories out, fix stories, repeat, repeat, repeat. Um . . . until you die, I guess. I went to Clarion and I looked at myself and thought "why the hell am I not sending stories?" Be-

cause I thought someone else was going to tell me when I was ready. No one can do that, nor should they.

**Matt London** <[truthoffiction.wordpress.com](http://truthoffiction.wordpress.com)> There is a difference between mystery and ambiguity. Mystery is when you don't know what is going to happen next. Ambiguity is when you don't know what just happened. Mystery is good; ambiguity is almost always bad. People often confuse the two. If someone (you don't know who) does something (you don't know what) the reader will never connect to the story.

**Gregory Frost** <[gregoryfrost.com](http://gregoryfrost.com)> Never name your protagonist "Fred." (Actually, Greg writes that this was Gene Wolfe's <[ultan.org.uk](http://ultan.org.uk)> first rule when he taught Greg at Clarion. So I'm letting Greg offer another lesson.) Don't write about professions and people you haven't bothered to research. No one will believe you know anything about them.

**Dana Huber** <[dien.gather.com](http://dien.gather.com)> Your plot should never hinge on Stupid. (I.e., your plot should never depend on a character doing something the reader can plainly see is dumb and is only being done for the sake of the plot.)

exit

Many of these writers' complete posts are gathered at the **Clarion blog** <[clarionfoundation.wordpress.com](http://clarionfoundation.wordpress.com)>. I wish my own post had been as interesting as those that followed it, but I was just trying to get things started, not move the universe. Just so you know, Five of the Many Things I Learned at Clarion are:

- 1) It's never too soon to start foreshadowing.
- 2) Adverbs are the enemy.
- 3) If possible, pick a life partner with money.
- 4) Rejectomancy is a waste of writing time.
- 5) You have less than a page to grab your reader — and your editor.

Isn't that right, Sheila? O

# THE END OF THE LINE

Robert Silverberg

**Our resident Grand Master, Robert Silverberg, is a long-time professional writer and winner of many Hugos and Nebulas who lives in California. His latest story is a new Majipoor tale that predates the events that took place in "The Time of the Burning" (March 1982). "The End of the Line" will be the first story in a new collection called *Tales of Majipoor*.**

“If you really want to learn something about the Shapeshifters,” the District Resident said, “you ought to talk to Mundiveen. He lived among them for about a dozen years, you know.”

“And where do I find this Mundiveen?” Stiamot asked.

“Oh, you’ll see him around. Crazy old doctor with a limp. Eccentric, annoying, a mean little man—he stands right out.”

It was Stiamot’s second day in Domgrave, the largest city—an overgrown town, really—in this obscure corner of northwestern Alhanroel. He had never been in this part of the continent before. No one he knew ever had, either. This was agricultural country, a fertile land of odd greenish soil where a widely spaced series of little settlements, mere scattered specks amidst zones of densely forested wilderness, lay strung out along the saddle that separated massive Mount Haimon from its almost identical twin, the equally imposing Zygnor Peak. The planters here ruled their isolated estates as petty potentates, pretty much doing as they pleased. The region was in its dry time of the year here, when everything that was not irrigated was parched, and the wind out of the west carried the faint salt tang of the distant sea. The only official representative of the government was the District Resident, a fussy, soft-faced man named Kalban Vond, who had been stationed out here for many years, filing all the proper reports on time and stamping all the necessary bureaucratic forms but performing no other significant function.

But now the Coronal Lord Strelkimar, who had grown increasingly strange and unpredictable in his middle years, had taken into his head to set forth on a grand processional, only the second one of his reign, that would take him on a great loop, starting from the capital city of Stee that sprawled halfway up the slope of the great central Mount and descending into the western lowlands beyond, and through these northwestern provinces, out to the sea via Sintalmond and Michimang, down the coast to the big port of Alaisor, and inland again via a zigzag route through Mesilor and Thilambaluc and Sisivondal back up the flank of the Mount to Stee. It was tra-

ditional for the Coronal to get himself out of the capital and display himself to the people of the provinces every few years, Majipoor being so huge that the only way to sustain the plausibility of the world government was to give the populace of each far-flung district the occasional chance to behold the actual person of their king.

To Stiamot, though, this particular journey was an absurd one. Why, he wondered, bother with these small agricultural settlements, so far apart, ten thousand people here, twenty thousand there, where the government's writ was so very lightly observed? This was mainly a wilderness territory, after all, with only this handful of plantations interrupting the thick texture of the forests. The Coronal, Stiamot thought, would do better directing his attention to the major cities, and the cities of the other continent, at that, where he had never been. Over there in distant, largely undeveloped Zimroel, in such remote, practically mythical places as Ni-moya and Pidruid and Til-omon, was the Coronal Lord Strelkimar anything more than a name? And what concern did their people have, really, with the decrees and regulations that came forth from Stee? He needed to make his presence felt there, where a huge population gave no more than lip service to the central government. Here, there was little to gain from a visit by the Coronal.

The chosen route was not without its dangers. The valley towns, Domgrave and Bizfern and Kattikawn and the rest, were mere islands in a trackless realm of forests, and through those forests flitted mysterious bands of aboriginal Metamorphs, still unpacified, who posed a frequent threat to the nearby human settlements. The Metamorphs constituted a great political problem for the rulers of Majipoor, for in all the thousands of years of human settlement here they had never fully reconciled themselves to the existence of the intruders among them, and now seemed to be growing increasingly restive. There were constant rumors that some great Metamorph insurrection was being planned; and, if that was so, this would be the place to launch it. Nowhere else on the continent of Alhanroel were humans and Metamorphs so closely interwoven. It was not impossible that the Coronal's life would be at risk here.

But it was not Stiamot's place to set royal policy, or even to quarrel with it, only to see that it was carried out. He was one of the most trusted members of the Coronal's inner circle, which was not saying much, for Strelkimar had never been an extraordinarily trusting man and had grown more and more secretive as time went along. Possibly the irregular way he had come to the throne had something to do with that, the setting aside of his kindly, foolish, ineffectual cousin Lord Thrykeld, a virtual coup d'état. In any case, a counsellor who contradicted the Coronal was not likely to remain a counsellor very long; and so, when Strelkimar said, "I will go to Alaisor by way of Zygnor Peak and Mount Haimon, and you will precede me and prepare the way," Stiamot did not presume to question the wisdom of the route. He was not a weak or a passive man, but he was a loyal one, and he was the Coronal's right hand, who would never even consider rising up in opposition to his master.

And the journey had a special appeal for Stiamot. He was among those at court who had begun to give careful thought to the need for a new policy toward the aboriginal folk. A good first step would be to learn more about them, and he hoped to do that by coming here.

They had always fascinated him, anyway: their silent, stealthy ways, their aloof and unreadable natures, their customs and religious ideas, and, above all, their biologically baffling gift of shapeshifting. He had spent the past several years gathering whatever information he could about them, striving to know them, to get inside their minds. Without that, what sort of settling of accounts with them could be achieved? But he had never managed any real understanding of them. He knew some words of their language, he had collected a few of their paintings and carvings,

he had read what he could find of what had been written about them, and still he stood entirely outside them. They remained as alien to him as they had been when, as a small boy, he had first heard that there existed on Majipoor a race of strange beings that once had had exclusive possession of the vast planet, long before the first humans had ever come to it.

There were no Metamorphs in Stee or any of the other cities in the capital territory, of course, but Stiamot, traveling through the land on this or that mission for the Coronal, had had a few brief glimpses of them. And once, when the Coronal had journeyed down to the Labyrinth to confer with the senior monarch, the Pontifex Gherivale, Stiamot had taken the opportunity to visit the nearby ruins of the ancient Metamorph capital of Velalisier, and quite a wondrous time he had had among those stone temples and pyramids and sacrificial altars. Out here in the hinterlands he hoped for a chance to experience the Metamorph culture at close range. And perhaps the eccentric Dr. Mundiveen would consent to serve as his guide.

Stiamot's first few days in Domgrave were spent arranging for the Coronal's arrival, checking out the route he would travel for places of possible risk, and seeing to it that the Coronal's lodgings would be not only secure but appropriately comfortable. It was too much to expect luxury in these parts, but a certain degree of magnificence was necessary to remind the local grandees that the ruler of the world was among them. Kalban Vond, the District Resident, offered his own house for the Coronal's use—no palace, but the closest thing to a stately house that Domgrave could provide, a many-balconied building three stories high with ornate moldings and handsome inlays of decorative woods—and Stiamot set about having it bedecked with such tapestries and carpets and draperies as this very provincial province could supply. He himself commandeered a smaller but nevertheless pleasant house not far from the main highway as his own headquarters. He met with wine merchants and providers of meat and game. He sent messengers to the prime landholders of the territory, inviting them to the great banquet that the Coronal would hold. In the evenings he dined with the Resident, who managed to produce reasonable fare, if nothing on par with what Stiamot had become accustomed to at court, and plied him with questions about the region, the climate, the predominant crops, the personalities of the heads of the leading families, and—eventually—about the Metamorph tribes of the forests.

The Resident, plump and slow-moving and at least twenty years older than Stiamot, was a conventional, cautious man, and beneath his caution Stiamot thought he could detect a weariness, a bleakness of spirit, a thwarted sense that he had hoped for more out of life than a career as District Resident in an unimportant and backward rural district. But he did not seem unintelligent. He listened carefully to Stiamot's questions and responded in abundant detail, and when Stiamot had returned once too often to the subject of the Metamorphs, Kalban Vond said, "You keep coming back to them, don't you? They must interest you very much."

"They do. It's nothing of an official nature, you understand. Just my own curiosity. We could say that I'm something of a student of them."

The Resident's sleepy blue eyes turned suddenly bright. "A student? What interests you, may I ask, about those sneaky, nasty savages?"

Stiamot, startled, caught his breath. But he showed his displeasure only by the slightest quirk of his lips. "Is that how you see them?"

"Most of us do, out here."

"Be that as it may, we have to consider that we share the planet with them. They were here first. We thrust ourselves down among them and shoved them aside."

"So to speak," said Kalban Vond primly. "Majipoor's a big place. There's plenty of room for both races, wouldn't you say?"

Stiamot managed a faint smile. "I wonder if they see it that way. But in any case, problems are brewing, and it's necessary to give some thought to them. Our population is growing very rapidly, and I don't just mean the human population. Ghay-rogs—Hjorts—the other non-human groups also—"

"Room for all," Kalban Vond said, sounding a little nettled. "A very big world. We've lived side by side with them fairly peacefully for thousands of years."

"Side by side, yes. And fairly peacefully, I suppose. But, as I say, there are more of us than ever before. The world is big, but it isn't infinite. And those thousands of years have gone by, and have they become our friends? Are we heading toward any sort of real rapport with them? You know as well as I do that there have been some very unpleasant incidents, and it's my impression that those incidents are becoming more frequent. They hate us, don't they? And we fear them. They put up with our settling on their world because they have no choice, and here in this valley you live next door to them wondering how long they'll continue to maintain the peace. That's so, isn't it?"

"Perhaps you put it a bit extremely," the Resident said. "Hate—fear—"

"A moment ago you called them 'sneaky, nasty savages.' Which one of us is being extreme? Is that how you usually speak of your friends, Resident?"

"I never claimed they were my friends, you know," said Kalban Vond. "You're the one who used the word."

Stiamot could make no response to that. In the chilly silence that followed, the Resident turned aside to open a second bottle of wine and refill their bowls. Something of a confrontational tone was creeping into the conversation, and perhaps this was meant as a calming gesture. They were drinking a surprisingly fine wine, a blue one from Stoienzar in the south. Stiamot had never expected to be offered anything so good here, or to have the Resident be so generous with it.

After a moment he said, a little more gently, "I think we both agree, at any rate, that we're not making much progress toward developing a more harmonious relationship with them. Not making any at all, in fact. But we need to. As our population grows, so does their resentment of our presence here. If we don't come to some sort of understanding with them soon, we'll find ourselves in a state of constant collision with them. Warfare, in fact. I've heard the rumors."

"Well, Prince Stiamot, at least here we agree."

"It can't be allowed to happen. We need to head it off."

"And do you have a plan? Does Lord Strelkimar?"

"It's not something his lordship has spoken of with me. But I assure you the Council has been discussing it."

Kalman Vond sat up alertly, and his eyes were once again gleaming. All that weariness and self-pitying sadness had fallen from him in a moment. Stiamot saw the man's unabashed eager excitement: it must seem to him that he was about to be made privy to intimate details of the deliberations of the Council. Sitting here sipping wine with one of the Coronal's close advisors was surely the biggest thing that had happened to him in all the years since he had been posted to this dreary province, and the thought that he would very shortly be playing host to the Coronal himself in his very own home must be dizzying.

But no revelations of court deliberations were going to be forthcoming tonight. Stiamot said, "We've been speaking about the Metamorphs only in the most general way, so far. Everyone agrees that we need to examine the whole problem much more thoroughly than ever before. And, as I said, my interest in them is a matter of mere personal curiosity. They fascinate me. Now that I find myself in a district where Metamorphs actually live, I hope to get a chance to learn something more about them—some details of their culture, their governmental structure, their religious beliefs, their art—"

"You ought to talk to Dr. Mundiveen about all that," said Kalban Vond.

Of course Stiamot's interest in the Metamorphs was much more than a matter of mere personal curiosity, but there was no reason why he had to explain that to the District Resident. The Metamorph problem had been central to Council discussions for the past several years, and, though nothing whatever had been heard from the Coronal on the topic, it surely had to be on his mind as well.

By and large, the Metamorphs kept to their secluded forest homes and the people of the cities and farming districts of Majipoor to the territories they occupied, and each group did its best to pretend that the other was not there, or was, at least, invisible. But there had been a good many ugly incidents. Wherever Metamorph and human interests overlapped, difficulties arose. The Metamorphs held certain places sacred, but who knew which ones they were, until a trespass had occurred? The ever-expanding human population of Majipoor, and its constantly increasing non-human adjuncts, kept pushing outward into new lands where the Metamorphs would abide no intrusion. Reports trickled to the capital of occasional outbreaks of conflict, of kidnappings and killings, of skirmishes, of massacres, even. Information took so long to reach Stee from outlying regions, and arrived in such uncertain form, that no one at the capital could be completely certain of what was taking place; but plainly there was friction, there was violence, and neither side was wholly without blame. Now and again Metamorphs, erupting out of nowhere in the night, had slaughtered human settlers venturing into places that should not have been ventured into. Humans, coming upon some tempting locality that invited settlement, had driven its Metamorph population out by force, or simply destroyed them. There had, of course, been such incidents throughout all the thousands of years since the first emigrants from Old Earth had come to this world. But as the cities spread outward and the agricultural settlements that supported them multiplied, they appeared to be increasing in number, and there were those at court who felt that sooner or later some great precipitating event would touch off an all-out war between the Metamorphs and the humans of Majipoor, and that event could not be many years away.

The court was broken into various factions. Some members of the Coronal's inner circle, a majority, perhaps, felt that a time was coming when complete separation of the races would have to be enforced, with the Metamorphs packed off into reservations of their own, possibly on the relatively lightly inhabited continent of Zimroel, and permitted there to live as they had always lived, but without access to the territories occupied by humans. An opposing group—not very numerous, but they were exceedingly vocal—regarded that as a futile notion, and were ready to launch an all-out war of extermination, arguing that the Metamorphs could never be confined in that way and such a plan was simply a prescription for an eternity of guerilla warfare.

Stiamot himself, who was by nature a mediator, a peacemaker, had emerged as the leader of a moderate central faction, one that saw great practical difficulties in the separationist scheme and looked upon the idea of a war of extermination as barbaric and repellent. It was Stiamot's hope that through sympathetic meetings of the minds, a determined attempt by each species to understand the needs and goals of the other, a permanent detente could be established, with clear lines of territorial delineation for each race and complete freedom of travel across those boundaries. In Council he had argued as persuasively as he knew how for such a policy. But Stiamot had not been able to make much headway with that over the extremists to either side of him. So little was known of the real nature of the Metamorphs, and so little had been done to reach out to them, that most council members looked upon his position as hopelessly idealistic. As for the Coronal, he had stayed aloof from the discussions thus far, lost as he was in what seemed to be some inner anguish that had

no connection to any of the governmental issues of the day. But he could not remain aloof forever.

The Coronal's arrival in Domgrave was still at least a week away when Stiamot saw his first Shapeshifter. It was the quiet time of the morning midway between breakfast and lunch, when the air was dry and still and the sun, climbing toward noon height, held everything in the grip of its insistent force. Stiamot was returning to his lodgings from a meeting with the head of the municipal police, going on foot down a sleepy street of small white-fronted houses flanked by rows of dusty-leaved matabango trees. A tall, *very* tall, figure wrapped in a flimsy, loosely fitting green robe emerged from an alley fifty feet in front of him, began to cross the street, saw him, halted, turned to face him, stared.

Stiamot halted as well. He knew at once that the man—*was* it a man?—was a Metamorph, and he was astonished to encounter one right here in town. The few others that he had seen before had been like wraiths, flitting through the edge of some forest glade and vanishing into the underbrush as soon as they were aware that they were being perceived. But here was this one right in downtown Domgrave, unmistakably a Metamorph, tall, thin, sallow-skinned, sharp of cheekbone, with long narrow eyes that sloped inward toward the place where its nose would be if there were anything more than a minuscule bump where a nose ought to be. It seemed as curious about him as he was about it, pausing, standing in that odd stance of theirs, one long leg wrapped around the shin of the other so that it stood with utter and total dignity while balanced on its left foot alone. Its stare was calm and chilly. Stiamot wondered what, if anything, he could do to capitalize on the opportunity that had been so unexpectedly presented to him. "I greet you in the name of the Coronal Lord Strelkimar, whose counsellor I am?" No. Ridiculous. "I am Prince Stiamot of Stee, and I have come here to learn something about—" No. No. "I am a newcomer in Domgrave, and I wonder whether you and I—"

Impossible. There was nothing he could say that would be appropriate. The Shapeshifter clearly did not want anything to do with him. Those cold downsloping eyes left no doubt of that. The purpose of that icy glare was to establish a boundary, not to build a bridge. Stiamot and the Metamorph were separated not only by fifty feet of space but by an infinitely greater gulf of difference, and there was no way to breach that barrier. All Stiamot could do was stand, and stare, and curse himself for a blithering feckless fool, hopelessly unprepared for this meeting with one of the beings he had come here to make contact with.

Then for a single strange moment the outlines of the Shapeshifter's body seemed to blur and flicker, and Stiamot realized he was watching some kind of brief, barely perceptible metamorphosis take place, a loosening and transmogrification of form that ended as quickly as it had begun, as though the Shapeshifter were saying, mockingly, *I can do this and you cannot*. And then the Metamorph swung around and continued on its way across the street, disappearing from view in a dozen long-legged strides, leaving Stiamot standing stunned and bewildered in the mid-morning stillness.

There was a second significant encounter much later that same day. Stiamot had fallen into the habit of going at the end of the day with some of the younger staff aides to an inn just off the main square that was frequented by the town's wealthier planters and any visitor from the outlying plantations who happened to be in Domgrave on business. Since these people were going to bear most of the not inconsiderable expense of playing host to a Coronal making the grand processional, it seemed like a wise tactic for Stiamot to go among them, share a couple of flasks of wine with them in their cramped, dreary little tavern, and reassure them that they would find the visit of the Coronal Lord very much to their benefit.

"He wouldn't have bitten you, you know," a dry, flat-toned voice said as Stiamot entered. He turned. "Pardon me?"

"The Piurivar. They're a damned shy bunch, most of them. If you actually want to get anywhere with them, you've got to open your mouth, not just stand there like a gaffed gromark waiting for them to say something.—I'm Mundiveen, by the way."

Stiamot had already figured that much out. *Crazy old doctor with a limp*, Kalban Vond had said. *Eccentric, annoying. Stands right out*. That much was easy. The man who stood before him, one elbow hooked lazily over the counter of the bar, was old, small, lean almost to the point of fleshlessness, a short, compact figure with piercingly intense gray eyes and a long, wild shock of coarse, unkempt white hair. Stiamot, who was only of medium height himself, towered over him. Mundiveen held his head at an odd angle to his neck and his body pivoted strangely at the middle, as though there might be some sort of a twist in his spine. It was not hard to imagine that he would walk with a limp.

"Stiamot," he said uncomfortably. "Of Stee."

"Yes. Yes, of course. The Coronal's advance man. Everybody in town knows who you are."

"And what I've been doing, also, I guess. You saw me talking to the—Piurivar, you called it?"

"That's what they call themselves. I like to use the term too. Metamorph, Shapeshifter, Piurivar, whatever you like. No, I didn't see you with him. What would I be doing awake at that hour? But he told me about it. He said you looked at him as though he were a creature from some other world. What do you like to drink, eh, Stiamot? First one's on me."

Stiamot shot a quick glance at the two aides with whom he had entered the inn, wordlessly telling them to fade away, and said to Mundiveen, "Let's start with gray wine, shall we? And then, when I'm paying, we can go on to the blue."

It was strange how quickly Stiamot began to feel at ease with this quirky little man. They would never be friends, Stiamot saw at once: the doctor was all sharp edges, prickly as a zelzifor, and Stiamot doubted that "friendship" was a word in his working vocabulary. The harsh, hopeless laugh with which he punctuated his sentences betrayed a profound mistrust of humanity. But Mundiveen seemed to be willing enough to accept a little companionship from Stiamot, at least. They crossed the room together—he did have a distinct limp, Stiamot saw—and settled at a corner table, and a zone of privacy appeared to take form around them, an invisible wall that set the two of them off from the crowd of noisy, boisterous planters who filled the room.

Mundiveen let him know right away that he was just about the only man in town who understood anything about the Shapeshifters. "Spent a lot of time with them, you know. Right there in their own forest. Helped one mend a badly broken arm—they do have bones, by the way; nothing like yours or mine but bones all the same, and they can break—and he took a kind of liking to me, and that was the beginning. One outcast to another, you might say."

"That's how you see yourself, an outcast?"

"That's what I am," said Mundiveen, laughing his hopeless little laugh, and bent low over his wine-bowl to forestall further inquiry.

"The District Resident said you'd lived among them for a dozen years."

"I still do live among them. If I can be said to live among anybody, that is."

"You live in the forest?"

"I have a place in town, and one in the forest. I move from one to the other as the spirit takes me. We need another flask of wine. You pay, this time."

"Of course." Stiamot signaled to the barmaid. "Where were you from, originally?"

"Stee, same as you."

"Stee? Really?"

"You seem surprised. No reason to be. Stee's a big city; nobody can know everybody. It was a long time ago, anyway. You were probably just a boy when I left there. Your Coronal, Lord Strelkumar. How is he?"

That was an odd phrase, Stiamot thought: *your Coronal*. He was everybody's Coronal. "His health, you mean?"

"His health, his state of well-being, his inner equilibrium, whatever you want to call it."

Stiamot hesitated. His eyes met the little man's—they were very pale eyes, not gray, as Stiamot had first thought, but a sort of washed-out yellowish-green, and one seemed imperfectly aligned with the other—and they revealed nothing, absolutely nothing. It would be improper, of course, for him to discuss the Coronal's state of well-being, of inner equilibrium, with any stranger he happened to meet in a tavern, even if the Coronal were in a perfect state of well-being, but especially because he was not. He paused just long enough and said, "He's fine, of course."

"I knew him," said Mundiveen. "In my days at court. Before he became Coronal. And for a short while after."

"You were at court?"

"Of course," Mundiveen said, and took refuge once more in his wine bowl.

The conversation, when it resumed, centered on the Shapeshifters. Mundiveen seemed to know—how? From the Resident, no doubt—that Stiamot had some special interest in them, and asked him what that was about. Stiamot attempted to explain, as he had to Kalban Vond, that it was primarily a matter of intellectual curiosity, a private hobby: he was, he said, fascinated by their folkways, their religious beliefs, their art, their language. But the fact that he was a member of the Coronal's staff, and not just that but an actual member of his Council, obviously made all that ring false to Mundiveen, who listened with as much patience as he seemed able to muster and finally said, "I'm sure you find them very interesting. So do I. Well, is some sort of policy shift in the making?"

"Policy of what sort?"

"You know what I'm saying. Policy toward the Piurivars."

Stiamot smiled. "Even if there were, I'd hardly be likely to want to discuss it, would I?"

"Even if there were, I suppose you wouldn't," said Mundiveen.

Beyond any doubt Mundiveen was the man to cultivate here. He was unlikely to learn anything valuable about the Metamorphs from the planters, all of whom appeared to regard them with contempt or loathing, if not complete indifference, mere impediments to their intended expansion of their plantations. But Stiamot knew he had to go slowly with this sardonic, bitter little cripple. There was something dark and angry in Mundiveen that had to be approached with caution: one could not be too open with him until one had some idea of the forces that drove that anger and that bitterness, and it was too soon to start probing for that now.

Besides, he had plenty of other things to do. Couriers brought him daily bulletins on the progress of the Coronal and his traveling companions: he was in Byelk, he was in Bizfern, he was in Milmorn, he was in Singaserin, he was moving steadily westward. He would stay the night in Kattikawn and in three days he would arrive in Domgrave. Stiamot spent the three days going over the final invitation list for the state banquet they would hold here, working out the formal program of speeches, conferring with the purveyors of meats and wines. And there were security issues to address. The Metamorphs came and went as they chose in the dark, sinister forests that surrounded these valley towns, and, as Stiamot could testify from personal ex-

perience, they seemed able to materialize and disappear like phantoms. If they had it in mind to assassinate a Coronal, madness though that would be, they would never have a better opportunity than this. Strelkimar was coming with his own guard, of course, but Stiamot thought it wise to enlist local peacekeepers in his service as well, and did.

On the second of those three busy days he went to the tavern again in the afternoon and found Mundiveen there once more, and had the same sort of uneasy arm's-length conversation with him over a couple of expensive flasks of wine, centering mostly on Mundiveen's years in the forest with the Shapeshifters. He wasn't actually a doctor, Mundiveen admitted: in the days of the former Coronal Lord Thrykeld he had been a mining engineer, whose special responsibility in the government was supervision of the sparse mineral resources that the giant but metal-poor world of Majoop had to offer. Once his days at court had ended—and he offered no information about that—he had lived in retirement in Deepenhaw Vale, farther down the Mount from Stee, where somehow he had picked up a few medical skills, and then he had found it best to leave the Mount entirely and wander off toward the west, coming eventually to the forests of this northwestern region. There, as he put it, he "made himself useful as a physician to the Piurivars."

Carefully, during the course of the evening, Stiamot nudged Mundiveen into telling him some tales of life in the Shapeshifter encampments in the forests surrounding Domgrave. He learned something about their tribal arrangements—they had a single monarch, he said, the Danipiur, who in some fashion ruled over all the scattered bands of Piurivars everywhere in the world—and a little, though it was not very articulately expounded, about their religious beliefs. In a muddled, sketchy way Mundiveen related also a Piurivar myth, the legend of some dreadful ancient sin they had committed at the old Shapeshifter capital of Velalisier long before the first human settlers had arrived, a sin so grievous that it had brought a curse down on them and led directly to the downfall of the race.

Stiamot supposed that someone who had as little liking for mankind as Mundiveen apparently did would have made a compensating shift in the other direction, taking refuge among the Metamorphs as he had because he saw them as the only beings on the planet worth living among, pure and true and noble, altogether undeserving of having lost their planet to the human oppressors who had settled among them six thousand years before. But it was not like that at all. Mundiveen never spoke of the Metamorphs with the sort of scorn that the District Resident had expressed—"sneaky, nasty savages"—but he seemed to have no more fondness for them than he did for humanity, letting slip between the lines, as he told Stiamot one story and another that night, that he found them a difficult, quarrelsome, even treacherous race—"a slippery crew" was the phrase he used—and that much of his medical work consisted of repairing damage that one Metamorph had done to another.

The legend of that ancient sin and the curse evidently had something to do with his attitude toward the Piurivars—the unspeakably evil thing that they had done twenty thousand years ago that had crushed them under the vengeance of their own gods. Whatever that had been, and Mundiveen could not or would not say what it was, the tale seemed to have revealed something about their basic nature to him and marked them in Mundiveen's eyes as a dark, troublesome lot. But perhaps, Stiamot thought, Mundiveen was inherently incapable of liking anyone at all, and chose to live among the Shapeshifters only because he preferred them, for all their faults, to his own species. Despite his manifold shortcomings, though, Mundiveen had had more firsthand experience of Shapeshifter life than anyone else Stiamot had ever encountered, and in the remainder of his time in Domgrave he intended to learn all that he could about them from the sharp-edged little man.

News of the Coronal's imminent arrival reached Stiamot two days later. He gathered a troop of peacekeepers and rode out to meet him east of town and escort his party into the city.

Strelkimar, wrapped in that dark cloud that seemed to go with him everywhere, greeted Stiamot in a perfunctory way, acknowledging him curtly with a quick, minimal movement of his hand. The Coronal was a commanding figure of a man, tall and powerfully built, but today he looked tired. That unfathomable darkness that lay at the core of his soul showed through plainly to the surface. Everything about Lord Strelkimar was dark: his eyes, his beard, the black doublet and leggings that he almost always wore, and, thought Stiamot, his soul itself. Stiamot suspected that the strange chain of events that had brought Strelkimar to the summit of power, the abrupt abdication and disappearance of his predecessor and all the whispered gossip that had surrounded the change of rule, had left some indelible mark on him. But all of that had happened before Stiamot's own time at court; he had heard the stories, of course, but had no hard knowledge of what had really taken place.

"Has your journey been a good one, my lord?" Stiamot asked.

The question was mere routine courtesy, the obligatory sort of thing that a courtier would ask his arriving master. But it seemed to anger the Coronal: Lord Strelkimar's obsidian eyes flared for a moment, and he scowled as though Stiamot had said something offensive. Then he softened. Stiamot was one of his favorites, after all, though it had appeared to take a moment or two for him to remember that. "These towns are all alike," he said gruffly. "I'll be glad to move along through here to Alaisor."

"I'm sure you will," said Stiamot. "The sea air will do you good, my lord. But I have a fine lodging waiting for you, and there will be an audience of notables tonight, and a state banquet tomorrow evening."

"An audience, yes. A banquet. Very good." The Coronal seemed ten thousand miles away. Stiamot conducted him into town—the whole population had turned out, lining the one main street on both sides—and took him to the Residency, where Kalban Vond greeted him with embarrassing obsequiousness. The Coronal asked to be left alone in his chambers for an hour or two. Stiamot obliged. He was glad to be free of the Coronal's oppressive presence for a little while. When he returned in late afternoon, Strelkimar seemed refreshed—he had had a bath and changed his clothes, a different black doublet, different black leggings, and he had even donned his crown, that slender shining circlet that was his badge of office and which most of the time he disdained to wear. But his lips were clamped, as ever, in that brooding scowl that he seemed never to shed.

"Well, Stiamot, have you been keeping yourself amused here?"

"This is hardly an amusing place, sir."

"I suppose not. Seen any Shapeshifters, have you?"

Was that some sort of mocking jab? There was a strange glint in the Coronal's dark eyes. Stiamot had been a member of the Coronal's council the past seven years, and was as close to him, quite likely, as anyone. But he never could tell, even after so much time, quite where he stood with Lord Strelkimar. He came from a good family, though not one of the great ones, and had risen very swiftly at court through diligence, loyalty, intelligence, and—to some degree—luck, a matter of being in the right place at the right time. Still, the Coronal was a mystery to him. Much of the time he still found Strelkimar an enigma, baffling, opaque, impenetrable. He said warily, "As a matter of fact, I have, my lord. One. Right in the center of town, crossing a street. We stopped and stared at each other for a moment or two. He did a quick little shapeshifting trick, or so I thought. And then he went walking away."

"Right out in the open," the Coronal said. "So there are some actually living in this town?"

"I don't think so. But they're in the forests all around, and I guess one of them comes drifting through, occasionally."

"And why is that?" said the Coronal, toying with the starburst decoration on the breast of his doublet.

"I have no idea, sir. But I can try to find out. I've met a man here who knows a great deal about them—has lived with them, even, in the forests—and he's been telling me something about them. I hope to learn more from him."

"Yes. Yes." The Coronal peered at his knuckles as though he had never seen his hands before. "The Shapeshifters," he murmured, after a time. "What an enigma they are, Stiamot. What a puzzle. I will never understand them."

Stiamot said nothing. An enigma contemplating an enigma was too much for him to deal with.

Brusquely, in an entirely different tone of voice, the Coronal said, "And what time is this audience I'm holding supposed to happen?"

"In two hours, my lord."

"Can you manage to make it any sooner? I'd like to get it over with."

"That would be difficult, sir. Some of the planters live a considerable distance from town. I don't see any way we could—"

"All right. All right, Stiamot." There was another long pause. Then, suddenly, unexpectedly: "Tomorrow morning, bring me this forest-dweller of yours, this Shapeshifter expert. Maybe he can teach me a thing or two about them."

Getting Mundiveen to come to a private morning interview with the Coronal was not so easy to accomplish. The little man had already made it clear to Stiamot that he was anything but an early riser; and simply to locate him was a problem. But with the District Resident's help he tracked Mundiveen to his lair, a little ramshackle cottage in a dreary corner of town, and sent one of his aides in to ascertain whether he was awake. He was, though not happy about it. Fortunately, the Coronal was no early riser either, and his idea of "morning" was more like early afternoon.

Mundiveen seemed taken aback by this summons to the Coronal's chambers. "Why does he want to see me?"

"I told him you knew a great deal about the Piurivars. He's interested in them, all of a sudden. At court he hasn't wanted to talk about them or, maybe, even to think about them, but now, for some reason—please, Mundiveen. You have to come."

"Do I?"

"He is the Coronal."

"And he can call me to his side just like that, with a snap of his fingers?"

"Please, Mundiveen. Don't be difficult."

"Difficult is what I am, my friend."

"For me. A favor. Let him ask you a few questions. This is more important than you can possibly know. The future of Majipoor may depend on it."

"I doubt that. But for me my *not* seeing him is more important than *you* can possibly know. Let me be, Stiamot."

"A few questions, only. I've promised him I'll bring you. Come. Come, Mundiveen."

"Well—"

Stiamot saw him weakening. Some powerful inner struggle was going on; but as the moments passed Mundiveen's resistance appeared to be diminishing. Refusing a royal command was evidently something that even the crusty, acerbic Mundiveen was unwilling to do. Or perhaps it was merely the fierce lofty indifference that seemed to underly everything he said or did, that cosmic shrug with which he faced the world, that led him ultimately to yield.

"Give me half an hour to get myself ready," Mundiveen said.

But the meeting was a brief and unhappy one. Mundiveen was strangely tense and withdrawn during the journey to the Residency, saying almost nothing. He came limping into the Coronal's chamber with Stiamot beside him, and when he saw Strelkimar he shot a look of such coruscating hatred at him as Stiamot had never seen in human eyes. Strelkimar, who was poring over a sheaf of newly arrived dispatches, took no notice. He barely looked up, greeting Mundiveen with no more than a grunt and a casual glance, and signaled that he wanted to continue reading for a moment. One had to grant a Coronal such whims, but Stiamot knew that Mundiveen was no man to honor even a Coronal's whim, and half expected him to turn indignant and leave. Surprisingly, though, he simply stood and waited, a tightly controlled figure, practically motionless, his breath coming in a harsh rasp, and at last the Coronal looked up again. This time, when his eyes met Mundiveen's, some violent unreadable emotion—shock, anger, despair?—swirled for an instant across Lord Strelkimar's face. Then it vanished, and was replaced by a steely fixed stare. He stared at Mundiveen with a terrible piercing force that reminded Stiamot of the look that that Metamorph had given him in the street. But despite the grim power of that stare Strelkimar seemed somehow unnerved by Mundiveen's presence, confounded, dazed.

"You are the expert on Shapeshifters?" the Coronal asked finally, in a low, husky voice.

"If that is what your man tells you, my lord, I will not deny it."

"Ah. Ah." A long silence. He was still staring. Another string of unfathomable emotions played across his features, a twitching of his lip, a clenching of his jaw. He was holding some inward debate with himself. Then the Coronal shook his head, slowly, the way a man at the last extremity of exhaustion might shake it. He was barely audible as he said, not to Mundiveen but to Stiamot, "It was a mistake to call him here. This is not a good moment for a meeting. I find myself very weary, this morning."

"If you say so, my lord."

"Very weary indeed. The man can go. Perhaps another time, then." He made a gesture of dismissal.

Stiamot was dumbfounded. To ask that Mundiveen be brought, and then to react like this, and send him away so hastily!—

But Mundiveen did not seem troubled by the courtesy. If anything, he appeared to be relieved to take his leave of the Coronal. Stiamot saluted and they went from the room, and, outside, Mundiveen said, "I wondered how he'd react when he saw me. Took him a moment to recognize me, I suppose. How awful he looked. By the Divine, what a haunted look there is in that man's eyes! And for good reason, let me tell you."

"I can't begin to tell you how sorry I am that—" Stiamot paused. "He recognized you, you say? He's seen you before?"

Acidly Mundiveen said, "I told you I was at court, in the time before he was Coronal. And for a little while afterward. You don't remember my saying that?"

"Yes. Yes, of course. I must have forgotten it."

"I wish I could. We go a long way back, your Coronal and I."

Stiamot passed his hand across his forehead as though to clear it from cobwebs. "You need to tell me what this is all about."

"I do? I *need* to? The same way I needed to go and see Lord Strelkimar?"

"For the love of the Divine, Mundiveen—"

Mundiveen let his eyes slip closed for an instant. "All right. Let's go have a bowl or two of wine, then, and I'll tell you."

"Wine? This early in the day?"

"Wine, Prince Stiamot. Or no story."

"All right," Stiamot said. "Wine."

\* \* \*

Mundiveen said, "I wasn't always twisted up like this, you know. In the days when Lord Thrykeld was Coronal I was quite an athlete, as a matter of fact. And when I was on a surveying trip I could walk miles and miles without the slightest fatigue."

"Back when you were a mining engineer."

"When I was a mining engineer, yes. At least you remembered that much. I was going to find the world's biggest iron mine, I thought. Not that Lord Thrykeld cared very much about that. All he cared about, really, was poetry and singing and his Ghayrog favorite. Do you know about that, the Ghayrog? Before your time, I suppose. But no matter. Thrykeld was the Coronal Lord, and I served him as loyally as you seem to serve Strelkimar, and I was going to present him with more iron than had ever been discovered before."

Mundiveen helped himself liberally to the wine. He seemed calm, icily controlled, betraying no sign of the ferocious rage that had come over him in his first moment in the Coronal's presence. Stiamot waited, saying nothing.

"The former Coronal, Lord Thrykeld," Mundiveen said at last. "I suppose history will call him a great fool. You probably know very little about him."

"Not much, really," said Stiamot. "Only the standard information."

"Then you must think he was a great fool. Most people do. Well, probably he was. But he was a gentle, sweet man, with a considerable gift for poetry and music. The people loved him. Everyone loved him. You must have loved him yourself, when you were a boy. But in the third or fourth year of his reign something began to change in him. There was this Ghayrog at court, a certain Valdakko, some sort of conjurer, I think. The Coronal spent more and more time with him, and then he brought him into the Council. Well, that was a little unusual, a Ghayrog in the Council. There never had been one before. They have equality under the law, of course, but they are reptilian, you know. Their metabolisms aren't like ours and neither are their minds. Thrykeld's cousin Strelkimar was High Counsellor then, and I can tell you, he wasn't pleased when the Coronal began to jump this Valdakko up like that. He took it as well as anyone could, though. But when Thrykeld decided that he wanted the Ghayrog to be High Counsellor in Strelkimar's place, things got, shall we say, a little tense."

"I heard about that," Stiamot said. "The Ghayrog as High Counsellor."

Mundiveen had finished his first bowl of wine, though Stiamot had had only a few sips of his. He went to work on a second one, savoring the wine, pondering it, seemingly lost in recollection of a far-off time. At length he began to speak again. "Strelkimar was very diplomatic about it all, at least outwardly. He behaved as though his cousin was just going through a phase. He loved Thrykeld, you know—as I said, we all loved him; a kind, good man—but gradually it became clear that the Coronal had become unstable, was slipping over, in fact, into a kind of megalomania."

Mundiveen went on to describe how, urged on by his Ghayrog counsellor, Lord Thrykeld had promulgated a law giving him the power to annul any previous statute without consent of the Council. This was absolutism; it was something entirely new in the history of the world. Strelkimar and a few of the other counsellors then made their objections known, objected very strongly, Mundiveen said, and Thrykeld—a Thrykeld none of them had ever known before—retaliated immediately, dismissing the entire Council except for the Ghayrog. He intended to rule, he announced, by personal decree.

"Strelkimar confronted him on that, of course," Mundiveen said. "Thrykeld flew into a rage. No one had ever seen him even mildly angry before. He ordered Strelkimar banished to Suvrael and all his possessions confiscated."

Astounded, Stiamot said, "I never heard a thing about that. It was never made public, was it?"

"Of course not. No one beyond the Council ever knew anything about it. Except me."

"You weren't a Council member."

"No. But I was very close to the Coronal. To his cousin, too. And I was stupid enough to try to intervene in the crisis. I got between them: I told Lord Thrykeld that it was very dangerous to try to strip a great prince like Strelkimar of his estates, and I went to Strelkimar and begged him to be patient, to wait his cousin's madness out, even to go into exile for a time until things calmed down. I was the very soul of moderation and conciliation. So of course they both turned on me."

Stiamot signaled for another flask of wine. The little man seemed to have an infinite capacity.

"It was impossible to reason with the Coronal," Mundiveen said, when he was satisfied for the moment. "He was far gone in his lunacy and the only person he would listen to was the Ghayrog. He drove me from his side. Strelkimar now let it be known that he felt the Coronal would have to be set aside, for the good of the whole commonwealth. I opposed him on that. I felt I had no choice about it. I went to him and said that Thrykeld was undoubtedly behaving very strangely, but no Coronal had ever been removed from office in all the history of the world; that to depose one would be an offense against the Divine; that all of this would surely blow over in a little while. No, said Strelkimar, his cousin was hopelessly mad. He intended to push him aside. I made the error of getting very excited. I swore great purple oaths that I would stand beside the anointed Coronal no matter what Strelkimar did. I threatened to go to the people with word that Strelkimar was planning to overthrow their monarch. I vowed to fight him every step of the way. My behavior was extremely rash. I forbade him to depose Thrykeld. Imagine that! Saying a thing like that to a man like Strelkimar. I became as crazy as Thrykeld himself was, I suppose."

He fell silent. The silence stretched for a minute or more. When it began to seem as though he did not intend to resume at all, Stiamot prodded him:

"And—?"

"And that evening three hired thugs wearing masks came for me and took me from Stee to someplace far downslope, Furible or Stipool or one of those cities, and there they beat me until both they and I were sure that I was at the edge of death, and then they left me. But I didn't die. They badly damaged me, but I lived. All they did was cripple me, as you see. Or did you think I was born with my backbone all askew like this?"

"Strelkimar's men, were they?"

"They didn't go to the trouble of telling me that. Make your own guesses."

"And the next thing to do was killing Lord Thrykeld, I suppose," said Stiamot, wondering whether he had fallen into some dream.

"Oh, no, nothing like that. They killed the Ghayrog, yes, but the Coronal was persuaded to sign a document of abdication. I can just imagine how he was persuaded, too. In his statement he declared that his health had unfortunately become too poor to permit him to continue to meet his royal responsibilities, and so he was withdrawing from the throne and going off to live in Suvrael. He sent a separate message to the Pontifex Gherivale, urging him most strongly to appoint Strelkimar as the new Coronal. So it was done; and Thrykeld left the palace; and then we heard the regrettable news that Thrykeld's ship had been sunk by a sea-dragon en route to Suvrael, as you probably remember, and that was that. As for me, I suspected that it would not be a smart idea to return to the capital. In fact I discovered, when I had begun to recover from what your Coronal's men had done to me, that I had lost all interest in the company of my own species, and I was years in recovering even a little of it. So I floated off quietly into the forests and took up my new career as a doc-

tor to the Piurivars." He paused again a moment and stared thoughtfully into his wine bowl. Then, looking up, he gave Stiamot a sharp sidelong glance. "Is there anything else you'd like to know, now?"

"No," Stiamot said. "I think I've heard too much already."

These revelations had rocked him like an earthquake.

He had known, of course, that Lord Thrykeld had given up his throne, pleading incapacity to serve, and that soon afterward he had been lost at sea. He had suspected, as many people did, that there probably had been more to the change of monarchs than that, that the forceful and charismatic Lord Strelkumar very likely had been instrumental in his cousin's decision to abdicate, though he had taken the tale of Thrykeld's deteriorating health at face value. But Mundiveen's tale of strife at court, of ultimatum and counter-ultimatum between the cousins, of the forcible overthrow of a king—and of Mundiveen's own near-fatal beating—gave the history of the years just before his own arrival at court a darker hue than he ever could have imagined. It all fit together now, Mundiveen's sour cynicism, Strelkumar's haunted, guilt-stricken eyes, the awkwardness and strangeness of the meeting of the two men this morning, so many years after all those terrible events. Lord Strelkumar lived daily with the knowledge that he had stolen the throne; Mundiveen lived daily with his fury and pain. And Stiamot had stupidly brought the two of them face to face.

"Now," Mundiveen said, "tell me what your Lord Strelkumar wants to know about the Piurivars."

"We want to find a solution to the problem of how we are going to live with them in the years to come, how we are going to share the planet. The Council is split in various ways, putting forth all sorts of ideas ranging from a geographical separation of the races to an all-out war of extermination. I myself hope to find some middle course. The Coronal hasn't been taking part in our discussions up to now, but he seems to have come around to an awareness that we need to deal with the issue. And so, in my innocence, I told him that I had encountered someone who had intimate knowledge of the Piurivar way of life, and he asked me to bring you to speak with him. Not knowing, of course, that that man was you."

"The truth must have come as a great surprise to him."

"Something of a shock, I would say."

Mundiveen smiled balefully. "Well, so be it. If he had allowed me to tell him anything, I would have said that there's no good solution to be found. Humans and Piurivars are never going to get along, my friend. Believe me. Never. *Never.*"

The formal state banquet was held as scheduled that evening, in the municipal festival hall, a lofty wooden structure with an arching roof far above. Planters had come in from all about, drawn by the novelty of a Coronal in their midst. A high table had been set up where the Coronal, in full royal regalia, sat flanked by members of his entourage, a duke or two, a couple of Council members, a sprinkling of Pontifical officials. District Resident Kalban Vond sat at the Coronal's right hand—the greatest honor ever accorded him, Stiamot supposed.

Just as the first course was being served Stiamot heard the sounds of a commotion outside, shouts, angry cries. Alarmed, he rushed to the window.

A struggle of some kind was going on right outside the hall. Stiamot saw bursts of flame limned against the night, shadowy figures running about. Looking back at the high table, he saw the Coronal sitting altogether motionless, frowning, lost once again in the darkness of his own thoughts. He seemed entirely unaware that anything unusual might be taking place. But the District Resident beside him looked stricken and aghast. His mouth was agape; his soft, fleshy face seemed to be sagging.

Then, unexpectedly, astonishingly, a side door that Stiamot had not noticed before opened and Mundiveen came limping in. After what had passed between the Coronal and him this morning, he was the last person, perhaps, whom Stiamot expected to see in the banqueting hall tonight.Flushed, panting, he made his way laboriously to Stiamot's side at the window.

"Metamorphs," he said hoarsely. "Disguised as townsfolk. Knives under their cloaks. They're throwing firebrands."

Stiamot looked out again. In the chaos beyond the window he was able to make out the guards attempting to form a phalanx. They were surrounded on three sides by a host of cloaked figures in rapid motion, flickering, changing dizzyingly from one shape to another as they moved.

He seized Mundiveen by the shoulder. "What is this?"

"The beginning of the insurrection, I think. They want to burn the building down."

"The Coronal—!"

"Yes, the Coronal."

"I'm going out there," said Stiamot. "I have to do something."

"No one can do anything. Especially not you."

Hesitating only a moment, Stiamot said, "Well, then, what about you? Even in the darkness, they'll recognize you. And you could talk to them. They trust you if they trust anybody. You've done so many things for them. Explain to them now that this is insane, that they have to withdraw or they'll all die, that the Coronal is too well guarded."

Mundiveen glared at him scornfully. "Why would they care about that? They're beyond all caring about anything. Don't you see, Stiamot, there's no hope? This is a war to the death, beginning right now, right here, and it will never end, at least not until you people recognize that you have no choice but to eradicate them altogether."

His words hit Stiamot with the force of a punch. *You people?* Did Mundiveen, then, think that he stood outside the human race? *You have to eradicate them altogether?* This, from a man who had spent so many years living among them? Stiamot faltered, speechless.

But then, abruptly, between one instant and the next, Mundiveen's expression changed. A flash of something new came into his eyes, a wild, almost gleeful look, something Stiamot had never seen in them before. "All right," he said, with a savage, twisted grin. "As you wish, my friend. I'll go to them. I'll talk to them."

"But—wait—wait a moment, Mundiveen—"

Mundiveen broke free of Stiamot's grasp and ran from the hall.

By now the Coronal seemed to have realized that there was trouble of some sort; he had half-risen from his seat and was looking questioningly toward Stiamot. Stiamot beckoned urgently to him to sit down. His figure would be too conspicuous this way if the Metamorphs succeeded in breaking into the hall.

Then he returned his attention to the window. Mundiveen had somehow succeeded in getting through the line of guards. Stiamot could see his small, angular form, moving clumsily and with great difficulty but even so at remarkable speed into the midst of the attackers. He was visible for a moment, his hands lifted high as though he were calling for their attention. Then the Shapeshifters swarmed in around him, surrounding him, yelling so loudly that their fierce incomprehensible cries penetrated the walls of the building. Stiamot had a fragmentary glimpse or two of Mundiveen tottering about at the center of their group, and then, as Stiamot watched in horror, they closed their circle tightly about him and Mundiveen seemed to melt, to vanish, to disappear entirely from view.

In the morning, after order had been restored and the bodies cleared away, and

while the preparations for the Coronal's departure from Domgrave were being made, Lord Strelkimar called Stiamot to his side.

The Coronal was so pale that the blackness of his beard seemed to have doubled and redoubled in the night. His hands were shaking. He had not dressed; he wore only a casual robe loosely girt, and a flask of wine stood before him on the table.

Stiamot said at once, "My lord, the Shapeshifters—"

Strelkimar waved him to silence with an impatient gesture. "Forget the Shapeshifters for a moment, Stiamot, and listen to me. There's news from the Labyrinth." Lord Strelkimar's voice was a ragged thread, the merest fragment of sound. Stiamot had to strain to hear him. "A message came to me in the afternoon, just as I was getting dressed for the banquet. The Pontifex Gherivale has died. It was a peaceful end, I am told. This has been a day of great surprises, and they are not yet over, my lord."

*My lord? My lord?* Had he lost his mind?

Blinking in confusion, Stiamot said, "What are you saying, my lord?"

"Don't call me 'my lord.' That's you, Stiamot. I am Pontifex, now."

"And I am—?" The startling implications began to sink in, and his mind swirled in a jumble of wonder and disbelief. This was unthinkable. "Do I understand you correctly, my lord? How can this be? You are asking me—me—"

"We are in need of a new Coronal. There's a vacancy in the position. The succession must be maintained."

"Yes, of course. But—Coronal—me? Surely you aren't serious. Consider how young I am!" He felt as though he were moving in a dream. "There are counsellors much senior to me. What about Faninal? What about Kreistand?"

"They'll be disappointed, I suppose. But we need a Coronal, right away, and we need a young one. You'll be fighting the war against the Shapeshifters for the rest of your life."

"The war?" said Stiamot leadenly.

"Yes, of course, the war. *Your* war. The war that we pretended for so long wasn't coming, and which has now arrived. And happy I am to be able to hand it to you and hide myself away in the Labyrinth. I have enough sins on my soul for one lifetime." Strelkimar rose. He loomed over Stiamot, a big man, heavy-muscled, deep-chested, still young himself. His face was bloodless with fatigue. Stiamot saw what might have been tears glistening at the corners of Strelkimar's eyes. "Come, man. Let's go out to the others and give them the news."

Stiamot nodded like one who moves in a trance. As it all sank in, the meaning of the bloody events of the night before, the change of government at the Labyrinth, his own precipitous rise to the Coronal's throne, he knew that Strelkimar was right about the coming of the war. He had known that it was coming from the moment of Mundiveen's death, or even a little earlier. There is no hope, the little man had said, before running from the banquet hall to yield himself up to his doom. This was something new, an attack on the Coronal himself, and it would not stop there. This is a war to the death. The uneasy peace that had obtained so long between human and Metamorph was at its end. And this was the end of the line, too, for Stiamot's own dreams of a moderate middle course, of some peaceful resolution of the Metamorph problem. The races must be separated, he thought, or else one of them must be exterminated; and now that high power had been thrust upon him, he would choose the lesser of the two evils.

"Come," Strelkimar said again. "I have to introduce the new Coronal to them. Come with me, Lord Stiamot."

The war began in earnest in the spring. It ended in victory in the thirtieth year of Lord Stiamot's reign. ○

# CORN TEETH

Melanie Tem

Melanie Tem's work has received the Bram Stoker, International Horror Guild, British Fantasy, and multiple World Fantasy Awards, as well as a nomination for the Shirley Jackson Award. She is the author of eleven solo novels, two collaborative novels with Nancy Holder, and two with her husband Steve Rasnic Tem. *In Concert*, a collaborative short story collection with Steve Rasnic Tem whose title story first appeared in *Asimov's*, was published in August 2010 by Centipede Press. The Tems live in Denver. They have four children and four granddaughters. Melanie's new tale was inspired by her experiences as an adoption social worker.

**H**er name's Sonya.

"So-nya."

"So." They get that part.

"Nya. Nya." Their great big old mouths get all wrinkly and she sees their big long teeth like straws they suck through and they don't have tongues, they have those little pillow things way back in their mouths, that Ib let her stick her finger in and feel. She doesn't have that pillow thing yet. She keeps hoping, but when she tries to find it in her own mouth, or when she tries to make the noise they make for the "nya" in her name, she feels like she's going to barf and it isn't the right noise anyway.

When she came here HI didn't say her name right, either, because it talks like them. At first HI made her really nervous, eyes and ears in every room, the voice coming out of nowhere. But they had her teach it and now it can say Sonya. She's told them to just call her So, but they keep trying to say the whole thing because it's respect or something. They can say Todd. Mommy and Daddy gave them Sonya and Todd for names and then Mommy and Daddy went away. She's going to change her name when she gets adopted, she doesn't know what to but something Ib and Yoolie and Zama can say. They say not to, it's a good name, but it's not.

She likes when Zama brushes her hair like this, likes all Zama's hands on her head and on her neck. Alayayxan kids have three parents. Sometimes four, she thinks. They call all of them some word that sounds sort of like a bad People word and Sonya tries not to laugh even when she's with People kids. Right now Sonya and Todd call Zama and Ib and Yoolie Zama and Ib and Yoolie.

Alayayxans are more than he's and she's, there's another kind, too, chchchs. Sonya thinks Zama's the she and Yoolie's the he and Ib's the chchch, which is hard to say.

When Sonya gets adopted, and her skin gets gray like theirs and her fingers grow

together and she gets more hand-things and all her hair falls out except some strings and her mouth gets big and her teeth get long like straws instead of these stupid little things like corn that Ib likes to touch because they're so cute and she has to make herself not bite, when the judge bangs the hammer-thing—Sonya heard the grown-ups say it was hard to find a judge who'd let Alayayxans adopt People kids or People adopt Alayayxan kids, she doesn't get why, but they found one—when that good judge says out loud so everybody can hear that she and Todd are theirs forever and they won't have to move again until they're all grown up, then Sonya'll miss getting her hair brushed. But she can't wait to put that weird oil on her gray head with almost no hair, that little bottle of it she stole from Zama's box. It's in with her underwear. Alayayxans don't wear underwear. Maybe she'll be a she Alayayxan after she gets adopted or maybe she'll be a he or maybe she'll be a chchch. She doesn't know how that works. It'd be kind of cool to be a chchch, whatever that is. Her corn teeth are already starting to fall out. Zama said something about the Tooth Fairy, but Sonya knows better than that. Or maybe the Tooth Fairy's real where their grandparents or whoever came from?

Sonya likes to visit Zama here at her work now. At first she was scared of the elevator and scared she'd get lost, which was dumb because how could you get lost in an elevator? And she didn't know how to act, if she should sit in the big hammock or not, what to say when People and the Alayayxans Zama worked with talked to her.

The big tall windows all the way to the floor and all the way to the ceiling made her feel like she was going to fall right into the city. She and Todd have only actually been down in the city a couple of times since they came to live here, once on a school field trip and once with Yoolie and Ib. But they used to live right down there in it and she might fall back in there. Or jump, or fly away into the orangey sky.

Back then HI had to remind her when it was time to go up to Zama's work and GoPHER had to take her so she wouldn't get lost or jump. Now she's big. She can tell time and she could ride the elevator eleven floors up from home to Zama's office all by herself and she doesn't even look out the windows. But HI still says every time, "Sonya. It's time to visit Zama" and GoPHER still brings her up in the elevator like she's a baby.

Zama's working. She keeps touching the screen with some of her hands while two or three of her hands pull the brush, smooth Sonya's hair, rub her head. Sonya watches the faces on the screen. Some are People and some are Alayayxan and some she can't tell. She listens to all their voices. She's with Zama so she isn't scared of them but she watches and listens.

Zama's busy. It used to be that made Sonya mad and she'd mess things up on purpose, spill stuff, throw stuff at the screen, crawl under things and hide, have tantrums, hit Zama. She was bad. Now she's good. She's a good girl.

When Zama gets busy Sonya thinks about other stuff, like her best People friend Amalie and her best Alayayxan friend Puy that's how you spell it P-U-Y but Sonya can't say it right and Puy can't say Sonya right and that makes them laugh. Puy and Amalie don't like each other. Amalie says her mom says it's wrong for one species to adopt another species. Puy says her chchch says it's wrong, too. Puy and Amalie both think it's wrong but that doesn't mean they like each other. It doesn't mean they're right, either.

It makes Sonya nervous to think about Amalie and Puy in the same thought so she thinks about the Dancing Doughnuts game for school where you have to get the ring thing over the ball thing and both of them change shape all the time and you can change the shapes yourself and it can be the universe with planets and moons and suns. An orrery. She can't really say that word. Is it Alayayxan or People? Maybe it's both, and she still can't say it. She's good at Dancing Doughnuts the game. She

can make the ball bounce when she moves her hand a certain way. She's not so good at orrrerys.

Thinking about orrrerys makes her nervous, too, so she thinks about what that social worker told them about Adoption Day. Sonya can't figure out if that social worker is People or Alayayxan or half-and-half if you can be half-and-half, maybe he or she or chchch. That social worker's one that lets you stay forever, not takes you away, and Sonya doesn't hide anymore but she doesn't talk she lets Todd do the talking. Adoption Day's when you get to stay with your family forever.

Ib put a squiggle around Adoption Day on the People calendar holo. Sonya goes to look at it every day, a bunch of times every day. It makes her heart hurt how it moves. Thirty-two, thirty-one, thirty, twenty-nine days. That's a long long scary time. Stuff could happen. Sonya has to be really careful so she doesn't make bad stuff happen just to get it over with so she'll have to move and she won't have to worry about having to move.

Their calendar doesn't work here. Ib says time's different on the old planet. That's dumb because days and weeks and months are days and weeks and months. Time's time. Anyway, they were born here and they grew up here and they live here. They shouldn't use the calendar from the old planet. Ib says a lot of things are different there and a lot of things are the same.

When Zama looks at those pictures on the screen from Layayx and listens to those weird voices talking in a weird language or maybe lots of weird languages, Sonya can feel something she doesn't like. Once she asked, "Are you mad at me?" That wasn't exactly what she meant.

"Oh, no." Zama said her name wrong and reached some of her hand things toward her but Sonya stepped back. "I'm happy at you," Zama said softly. The picture on the screen was a whole bunch of Alayayxans without any hairs at all.

"You wish you were there instead of here?" Sonya didn't say "here with me."

"This is my home," Zama told her. "It's just—" She turned the picture off. "Something pulls me. You know how when you think about your birth Mommy and Daddy you feel pulled?"

Sonya yelled, "No, I don't! Don't say that! You don't know anything!" and she punched the screen and went and hid in her room but HI knew where she was HI knows everything about everybody in the house and Zama found her right away and held her with all her hands and they both cried with their different cryings.

Sonya doesn't exactly know where she comes from. She knows it's here, it's Earth, but it doesn't feel like the place she comes from. Nowhere does.

Layayx has got a sun and a whole bunch of moons. Sonya used to like the moon because it made her think of Mommy and Daddy, she didn't know why. Now just one moon is like you're poor and you don't get enough to eat.

Some People say the Alayayxans should go back where they belong. There's already way too many people on Earth, not enough food, not enough water you can drink. In school they're studying all those poor People and poor Alayayxans far far away on Earth. Her notebook's got notes and sometimes she taps her pen on "poor" or "homeless" or "die of starvation" just so she can hear the teacher telling her all about it over and over and over. Chchch says they have to know how things are for others.

Sonya doesn't see why. That's not here. That's far far away on the other side of the world somewhere, or on the other side of the universe like a dancing doughnut, or in those apartments under the ground where Ib works that she can't help seeing and hearing and smelling and tasting from the screens. They're right underneath the ground. They could poke up their heads and all their hands and grab her, and she holds on tight to Boo even though he's breakable and couldn't really keep her safe.

In their building there are a lot of People and a lot of Alayayxans, but everybody

she knows has plenty to eat and to drink and smart houses, and her Alayayxans belong here just like Todd does and she does. Those People who say they don't are just mean and liars.

She holds on tight to Boo and he says in his happy voice, "Don't worry, Sonya. You're safe." He says her name right.

Zama says, "Oh, are you scared, Sonya?"

Sonya forgets and shakes her head. Her hair pulls.

Zama says, "You are safe, you know."

Sonya stops herself from shaking her head yes and says, "I know." Zama keeps brushing her hair, very soft and gentle, and Sonya leans back into her and Boo snuggles into Sonya and it's nice. Sonya lets it be nice for a while.

One time Ib showed her where Layayx is. First it was a dot that kept moving like a teeny tiny ball. Then Ib made it fill up the whole entire screen, lots taller than she is and lots wider than she can reach her arms on the screen where she does her homework and plays games and hears music and they order stuff and work and talk to People and to Alayayxans all over the world. Some of the Alayayxans from all over the world are going to come here for Adoption Day. She won't look like them until the judge bangs that hammer on that table, and she hopes they won't hate her and think she's ugly even though she still will be when they get here. Maybe she could run away just before they get here and then just show up at the judge's place and then there'll only be a few minutes until she looks like them. But where would she go?

Now Zama's done brushing her hair. Sonya's head hums. That feels good. Zama always says, "Your hair is very pretty." Sonya waits for her to say it now, and she does. "Your hair is very very pretty." This morning Sonya tried to pull some more of it out. That hurt. Nobody saw her do it except HI. A couple of ugly blonde hairs are stuck in the brush. Probably HI knows about the slimy hair like a little banana peel she pulled out of the drain Wednesday and made a ring out of and hid it in her shoe and waited till everybody was asleep and then she put it on and it felt weird and she liked how it felt—

Todd said, "What's that?"

Sonya jumped and went "Ack!" When she put her hand with the hair ring on it under the covers she whapped her elbow on the wall and it hurt and she made another loud noise and it felt like all her fingers got mashed together. With the other hand that still felt like fingers she pushed Todd away. "Go away!" she whispered. "Butthead!"

"Ooh, you said a bad word! I'm telling!"

He started out of the room and she said almost out loud, "Look! It's a hair ring. See?" like when Mommy and Daddy'd been fighting or gone or sick and she'd tried to keep him quiet.

Todd came back and climbed onto the bed and crawled over her and looked really close at her ring without touching. "Eeuw," he said. "That's disgusting. Where'd you get that?"

"It's mine. It's my hair."

"Eeuw." Then he got in under the covers with her like in the hot crowded apartment or on the hot crowded street with nobody they knew and just the one moon in the sky or the hot sun in the sky or rain that could make you sick and Mommy and Daddy might come back or they might not ever come back. She didn't have Boo then. Mommy and Daddy didn't have a smart house. All the places they lived were really dumb.

She let Boo cuddle up to Todd. GoPHER and the mice bots were cleaning in the living room. They used to scare her but now the teeny tiny whirs and buzzes and beeps made her feel taken care of. HI still scares her sometimes when it talks all of a sudden and it knows everything about everybody. But she's practicing how to ask it stuff and tell it to do things with her voice and with her People hands and her People body.

After a while that night Sonya whispered to Todd and to Boo, "We're gonna get adopted."

"What's adopted?"

She didn't exactly know, still doesn't. They'd talked about this a zillion times. With Yoolie and Zama and Ib but never just the two of them. "We're gonna go talk to a judge and Yoolie and Ib and Zama are gonna say they want us forever and the judge is gonna say we're their kids forever and there's this big hammer and the judge'll pound on the table with the hammer and then we'll turn into Alayayxans."

Todd stayed quiet. Sonya thought maybe he was asleep. That made her mad and she was going to poke him but then he said, "Huh-uh. We're People."

"Uh-huh. Just like them." She was smiling in the dark. Smiles always feel bigger in the dark.

So do tears. "I don't wanna get adopted!" Todd was punching her.

She pushed him off the bed. Boo growled. "Don't you mess this up for us, butthead." She was hissing like Ib does sometimes.

"I'm telling!" This time he did go and get Zama and Zama came in still sort of all curled up from sleep and she didn't get mad she just talked to them but they wouldn't either one of them tell her what they'd been fighting about.

Now it's twenty-seven days. Yoolie takes them to the Park Room. It's springtime in there, birds and blue sky and flowers that look pretty and smell pretty but don't die if you forget to water them. There's a big long line all the way down the hall, People kids and Alayayxan kids and their grown-ups. Sonya doesn't like to stand in line. She doesn't care about "social skills." She wants to go home. Yoolie says they'll go home right after they play in the Park Room.

Yoolie says most families aren't as lucky as they are. He means their apartment on the seventy-third floor with just the five of them in it. He means Alayayxan parents who are going to adopt People kids no matter what dumb mean People and Alayayxans say. He means People kids that are going to be adopted and turn into Alayayxan kids in twenty-six and a half days.

Todd's avatar gets into a fight right away with a bunch of Alayayxan avatars, and Yoolie stops it. Todd is so embarrassing. Right now Sonya wishes she'd never found him that day in the real park that wasn't as nice as this one, all hot and brown and dirty sky and no trees or flowers or birds and really crowded and yucky air and Daddy and Mommy left them there and Todd got lost and Sonya looked all over for him and she found him and he was scared. She was scared, too.

Yoolie's paying attention to Todd. Sonya puts both her hands on the Alayayxan kid in front of her. At first whenever she touched Alayayxans, on purpose or by accident, it freaked her out. They're not furry or soft or rough or smooth. She doesn't know what the word is because nothing else feels like Alayayxans. Now she wants to touch them all the time. She used to try to touch Alayayxan kids all the time and they'd get mad and they'd call her things and they didn't like her. Zama and Yoolie and Ib let her touch them, not as much as she wants to but sometimes. Right now her own skin and Todd's skin still just feels like skin. Todd punches her whenever she tries to feel his skin so she waits till he's asleep. The kid in front of her just moves away.

Sonya tells Yoolie she's sick. Finally they go home. Yoolie tucks her into bed with Boo and puts that sticky on her neck that's supposed to make her feel better but it won't work this time because she isn't that kind of sick. When Yoolie leaves her room she crawls way back under the bed and gets out her hair ring. She wears it every night now. It feels weird to have her own hair around her own finger. All of a sudden it occurs to her that when she gets adopted she won't have fingers to wear the ring.

She tells Boo the family story again. "Long long ago before they got us, they knew

they were going to get us but we weren't here yet, did you know they went to a class so they could learn how to take care of People hair?"

"Yes," says Boo. "I did know." He always says that. What Sonya says and what Boo says back is like a nursery rhyme.

Boo is soft and furry. He's a bear. That's an animal that used to be on Earth or on Layayx, she isn't sure which. He's blue, blue Boo, except for white feet and white around his eyes and a shiny black nose. Boo isn't a real bear because there aren't any. But Sonya knows he really is real.

He says, like always, "Do you like that story, Sonya?"

Sonya cuddles Boo and whispers to him, "I like that story. It makes me happy."

"What else, Sonya?" He says her name right. She's the one who taught him.

"Sad."

Boo says, "Good girl, Sonya," so that must be the right word for what she's feeling. She's happy then, she's a good girl, she thinks she can go to sleep.

But she can't stop thinking about how sometimes People aren't very nice to Alayayxans and Alayayxans aren't very nice to People. People kids stick out their tongues because they can and Alayayxans can't. Alayayxans wave all their hands and feet and they always wear hat things outside because of the sun and they hiss about how disgusting People hair is. Sonya keeps losing her hats. People say the way Alayayxans move is creepy and they try to do it themselves to make fun but they don't have enough feet and their bodies are too thick and it looks really funny. Sonya can do it a little and pretty soon it'll just be how she moves and she won't have to practice and it won't hurt her back.

Alayayxans call People "twenties" and "fringies" because of fingers and toes, and "hairies" because of hair, and other stuff in their own languages that Sonya can tell isn't very nice. People call Alayayxans "squids" and "flips" and other stuff Sonya doesn't understand even when it's in English or German or French or Mandarin. "Butheads" she knows is because of their big long mouths that go sort of slanty up and down. That's a really bad word. Axan is a really really bad word, the worst one you can say. The People kid who called Ib Axan butthead and called Sonya Axan-lover that time got expelled, and Yoolie made that sound, kind of like a broken mouse bot, that means an Alayayxan is really really upset and Sonya wanted to beat up that kid but that would just upset Yoolie even more.

Sonya sits up. Boo says, "It's bedtime, Sonya."

She ignores him and says into the cooled darkness, "House. Water, please." What she really wants is mixl. She never had mixl till she came to live here, and at first it was disgusting but now she loves it. But water's the only thing she's allowed to have after bedtime. At first GoPHER couldn't understand most of what she said, but Ib made them practice together. Here it comes now. It's got two flippers wrapped around a little cup of water. That looks silly and she laughs. You can't hurt GoPHER's feelings. She used to be scared of GoPHER but now mostly she's not.

"House," she says, just to see. "Mixl, please."

HI says back, "No, it's too late for mixl." She knew it would say that. It's programmed to say that. It doesn't mean there won't be any food. GoPHER's still standing there. She remembers she has to say thank you so it'll know to go away. "GoPHER. Thank you," and GoPHER goes away. Sonya takes a few sips of water.

The night after the kid said that really really bad thing to Yoolie and made him rattle like that, when she couldn't sleep, Yoolie put one of his big long smooth flipper hands next to her small ugly bumpy one with fingers and he said to her, "Isn't it just marvelous that there are so many kinds of beauty in the universe?"

That did make Sonya feel good for a while. She said, "I love you."

It was the first time she ever said that to an Alayayxan. Yoolie turned that greeny

color that means they're something like happy. He put all his flipper-hands on her, really soft, and she sat really really still. "I love you, too," he said to her, and then he said it in his language and she said it after him, "Emanet lor," and he said she got it right the first time. She didn't tell him she'd been practicing. Then he called her the Alayayxan word for "my child," something like brigl diaymeni. Yoolie and Ib and Zama don't have any real kids. When Yoolie calls her "my child" Sonya feels real, and that makes her scared and mad and something like happy, but her skin doesn't turn greeny. It will be nice when she can tell what she's feeling by the color of her skin.

Sonya's getting sleepy. She knows it's safe here to fall asleep but sometimes she still doesn't know it. When she gets adopted and she's like them she'll really really feel safe. She sings an Alayayxan song to Boo and he sings with her. Then Boo starts that People song about the star and they sing it together.

She's getting sleepy. It's safe here to fall asleep. She runs her tongue back and forth across her teeth. One of them's loose. She falls asleep.

It's nineteen, fifteen, twelve days till Adoption Day. A bunch of scary things happen. Some are nice and some are not nice and they're all scary.

Zama and Ib and GoPHER cook a lot and the house smells good and smells weird and Todd tries everything and Sonya tries a couple of things and the mice bots buzz around cleaning up. Pictures of the Alayayxan relatives keep being on the screens and she doesn't know any of them, what if they're mean? There's a huge fire someplace and a huge flood someplace and wars and hungry kids, and what if the judge dies before Adoption Day? There's an earthquake, far faraway but it's the same Earth, and what if the Earth falls apart? Todd gets in trouble at school. Sonya gets the highest marks in the whole class. The hair ring falls apart but she's still got hair so she can make another one but she doesn't. Ten days till Adoption Day.

Oh.

Maybe it's in Alayayxan time? Ten Alayayxan days? How long would that be? Maybe it's today and nobody told her. Maybe it's a long long time. Maybe it's never. Maybe it's already happened and she forgot because time's all different and that's why her body's still People. She wiggles her loose corn tooth with her People tongue. She spreads her fingers. Then she wraps her frangie fingers around a bunch of her hair and pulls hard but she doesn't get any.

Then her tooth comes out, a little bloody white kernel between her two fingers. She wraps it up and puts it under her pillow. She's awake but she pretends she's sleeping when Zama sneaks in and takes the tooth and leaves two red bills, five dollars each, that's ten dollars, she can buy a couple tubes of mixl. What happens to her corn teeth that fall out? She imagines them all in a little box somewhere, grinning. She imagines them in the garbage, growing. Her tongue can just barely feel the pink-white edge of a brand new big tooth like a straw that's going to be right there in the front of her mouth in nine and a half days.

After Zama leaves the room Sonya gets scared she'll really fall asleep and she'll miss Adoption Day. Very very quiet, she gets up with Boo in her arms but he might make noise so she tucks him back in bed and she tiptoes by herself out of her room and down the hall to where the calendar screen hangs in the air. It's flashing ten days till Adoption Day. She counts. Ten days. "Can't sleep?" says Ib behind her.

Sonya jumps. Her heart hurts. "How many days?"

Ib puts many arms around her. "Ten. See?" Ib's pointy flipper points to the little flashing circle.

"Nine and a half. What kind of days?"

Ib doesn't get it. Then, "People days. We're here on Earth so it's People time." Then the flashing circle jumps to the next day because it's the next day now, and they both say, "Nine days!" and they both laugh.

While Ib's taking her back to bed, Sonya's half-asleep and she mumbles, "Nine days."

"Yes," whispers Ib, rubbing her back and her head. "Nine days."

"Nine days till we get adopted."

"Yes."

"Nine days till we're yours."

"Oh," Ib says, "you're already ours."

"Nine days till we look like you."

Ib stops and looks down at her. "What do you mean, Sonya?" She likes how Ib says her name. Maybe she'll just keep that.

"Till almost all our hair falls out and our skin gets your color and we don't have fingers and toes and we have lots of arms and legs and our mouths go like this." She leans her head back so chchch can see how she squirms her mouth around till it's as slanty as she can make it right now. "Nine days. Right?"

Ib sets her down. She's done something wrong.

"Nine days till we turn into Alayayxans!" Sonya yells. "Just like you!"

Ib says something like, "Ohhhhhh."

Sonya whispers, "When I get adopted," and it's nine People days till she turns Alayayxan, and Ib takes her back to bed and sits with her till chchch thinks she falls asleep.

Eight days. Seven days.

Something's wrong. Yoolie keeps touching her. Zama wants to brush her hair all the time.

One day right after school: Scream.

Something screams like a lost baby, more like a lost big kid, an Alayayxan big kid because it isn't a People voice. Sonya covers her ears. Sonya makes her voice sound sort of like the other voice and they're both wailing. Then the other voice stops but she can't stop and GoPHER brings her her pen, she didn't even know she'd lost it, she wraps both hands around it. She wishes she had her other hands already and she'd wrap all them around it. The pen's thick and quiet now and it's smarter than she is, it knows more than she does. Sonya keeps on wailing and wailing and Zama holds her for a long time smoothing her hair while mice bots whir around their feet, cleaning for company. Sonya's two feet and all Zama's feet make a tangle. She keeps shaking for a long time and Zama holds her for a long time. Another tooth's loose.

Six days now. There's a bump on her shoulder that's going to be a flipper. There's a place on the side of her knee that's kind of gray and feels different, not soft or smooth or rough. She can scrunch up her mouth so it's almost slanty and Ib tells her don't do that but she can't help it that's how her mouth is now and it's hard to eat so she doesn't eat much and she's not even hungry. Her tummy hurts. Her loose tooth hurts and she wiggles it with her tongue not a pillow thing yet.

Zama's making her a dress to wear when they go to see the judge. "Will it fit?"

"HI knows how big you are." Zama's feeding the old green too-small and worn-out dress into the copier. Her face and her head are kind of greeny, too. Zama gets that color a lot. Sonya's happy, too, she thinks this is happy, but she doesn't think any of her own skin gets that color. It will, though.

That used to be Sonya's favorite dress. She didn't mean will it still fit now because I'm bigger. "When the judge bangs the hammer and I get adopted," she tries. "Will it fit me when I get adopted?"

The new dress slides out. It's got the bow Sonya wanted and it's got more flowers. Zama holds it up. "Let's see." It does fit, and it's really really pretty, and Sonya can't help smiling.

But that isn't what she meant, either. "When I get tall and skinny like you, will it fit me?"

"We can just change the settings as you grow. But I don't think you're going to be tall and skinny. Your birthparents—"

Sonya's whispering like she's telling a secret. "Can we put lots of sleeves in it?" She sees Zama understand.

"Oh, brigl diaymeni!" Sonya can tell she doesn't want to hear what Zama's going to say next, and Zama says anyway, "Oh, brigl, you aren't going to turn into an Alayayxan. Is that what you thought?"

Sonya whispers, "You're a liar!" and hits her.

Zama reaches for her but Sonya backs away. "Sonya, Sonya." That's closer than any of them have ever said it before. "You're People. You're a beautiful People child, you're our child, and emanet lor—"

Sonya runs to her room. Behind her Zama is still saying Brigl. Sonya grabs Boo.

Yoolie works high up somewhere. Sonya's never been to his work. She gets off at the eighty-first floor and she tells a People guard she's looking for Yoolie and the guard says nobody by that name works here and Sonya should go home but she goes to the eighty-second and eighty-third and eighty-sixth floor and eighty-ninth and on the ninety-first floor Yoolie's waiting for her when she gets off the elevator and she runs into all his arms.

Yoolie doesn't lie. She didn't think Zama would lie, either. Yoolie doesn't lie. He picks her and Boo up and carries them into a little room where there's a long Alayayxan chair with arm rests and leg rests like the wheels on the bike Daddy used to ride her on and it was always breaking down and they had to walk and walk on the city streets. There are screens everywhere and stuff on them she doesn't understand, things that sort of look like letters and numbers but they aren't letters and numbers, lines and squares popping out, and there's lots of little noises.

Sonya presses herself into Yoolie and presses Boo into herself. Nobody says anything for a while, and she's starting to relax, she's almost sleepy, and then Yoolie's stroking her ugly hair and he says quietly, "Be proud of who you are, my child. Zama and Ib and I are proud of who you are. You'll always be People, and that's wonderful—" and she bites one of his hands hard and she pretends it was Boo who bit him and Yoolie makes a noise and she knows he hates her and he's a liar and she runs away with Boo but Yoolie catches her and she knows she's in trouble and he'll hurt her and he'll hate her but he doesn't and they go down to the house and she won't talk to him and when he tries to touch her again with his flipper things she thinks she might barf and she says don't touch me don't touch me ever again and he says her name wrong wrong wrong and she calls him butthead and she runs into her room and he doesn't come after her. So he does hate her.

Five days. Relatives come. Not her relatives. Todd's talking and laughing and playing like they're his family, but they're not. Sonya is Todd's only family and Todd is Sonya's only family and she needs to tell him that but he's too busy playing with the flips the squids.

Sonya plays Dancing Doughnut. She yells and she jumps around and her hands go all over the place and the hole and the doughnut go all crazy and they don't come anywhere near each other. Ib tries to play with her but she tells chchch go away. She won't eat. GoPHER comes with a tray of food. Sonya throws Boo at GoPHER and knocks stuff off the tray and Boo's in three pieces and her heart hurts but she doesn't care. GoPHER picks up the stuff and puts broken Boo on her lap in a pile. GoPHER leaves. A mouse bot buzzes in and cleans. She kicks at it and misses. It doesn't care. Ib comes in again. "Go away. You dirty squid."

Ib breathes funny but doesn't go away. "Emanet lor," chchch says, and then "I love you" like she doesn't know what emanet lor means. She's not stupid.

"I hate you! You nasty old flip!" Her tummy hurts. Her head hurts. Her tooth is

hanging on by just a piece of skin. Maybe she'll swallow it. She laughs. Ib leaves. The door slides shut, it doesn't make any noise, she wishes she could slam it, she remembers doors slamming. She's by herself. She tries wailing but she won't ever get found.

After a while she has to go to the bathroom. She could pee and poop in the corner, that'd show them what she thinks of them. But she's not a baby and that would be disgusting.

"House, open door, please." You can't whisper to HI or it won't hear you. The door slides open into the wall. Can they hear that? She hears them, lots of Alayayxan voices and Todd's People one all happy. "House," she whispers. "Burn down." But HI can't hear her and it doesn't. So she just says out loud to close the door.

When she comes back and says to open the door, it doesn't. She says it louder. She tries to open the door herself with her fingers. She kicks the door. She yells. She's locked out. Somebody locked her out, HI locked her out, the house doesn't want her here.

"Are you my cousin Sonya?" It's an Alayayxan girl. She says her name almost right, and Sonya wants to beat her up.

"No. I'm the Tooth Fairy."

"There's no such thing as the Tooth Fairy. That's just a stupid People story."

Sonya jumps on her and claws her gray face and the girl pounds on her with about a zillion hands and feet. They're both yelling. Grown-ups come and pull them off each other and make them stay away from each other. Axan grown-ups.

Four days. That social worker comes to talk to Sonya and Todd and Yoolie and Ib and Zama about Adoption Day. Todd's all happy. "I don't want to be adopted," says Sonya, very loud.

Todd punches her. "Shut up!"

That social worker says, "Oh," and then, "Why?"

Sonya just stares at her fingers wiggling in her lap. She pushes her loose tooth with her tongue but it still hangs on by one piece of skin like a hair. "She's just dumb," says Todd.

Ib says, "She's not dumb. She's hurt. She's scared." Sonya hates chchch.

Zama says, "She thought she would turn Alayayxan when the adoption is legal." Sonya hates her. Sonya wants to say not Alayayxan, Axan. Axan. But she doesn't dare.

Todd says, "That's really dumb."

That social worker starts to say something and Sonya stands up and screams, "You're a liar! You're all liars! I don't want to be an ugly stupid butthead Axan!" She's never said that word out loud before. It's like one moon in a hot black sky.

Todd kicks her. Ib leaves the room.

Mice bots buzz around, cleaning up after everybody, but they can't clean up after Sonya.

Zama is shaking. The parts of her body don't all shake at once, so it's like ripples on a screen.

"Shut up," Todd tells her. "Shut up shut up."

"We're not their kids, dummy," Sonya says to him. "They're not our parents. We're People and they're ugly Axans. Daddy and Mommy were our parents. We don't get any more—"

Yoolie comes over to her. "Sonya," he says almost right, he'll never get it right, "brigl diaymeni—" and Sonya screams at him, "I'm not your child!" while he's saying very softly, "I know you're scared."

Everybody's quiet except Todd's crying and the Axan relatives are talking in other parts of the house and HI has started nice music playing and the mice bots are buzzing.

That social worker says, "I think Sonya and I need to talk privately."

Sonya says no but it doesn't matter what she says.

Yoolie and Zama take Todd out of the room. She watches them go. He's really little and People. They're really tall and Alayayxan. Axan.

That social worker comes and sits close to Sonya and asks her in a creepy quiet voice, "What is it, Sonya? Did something happen?"

Duh. Lots happened. Lots always happens. Sonya doesn't have anything to say to that stupid Axan social worker.

"Sonya?" You couldn't even tell it's her name if you didn't know. "Is somebody hurting you here? Do you feel unsafe?" Not like that, so she shakes her head. If she has to she'll say somebody's hurting her. That social worker gets closer and Sonya backs up against the wall. "Is Zama right, Sonya? Did you really think you were going to—"

"No!" Sonya runs to her room and tells the door to open but it doesn't so she runs out into the big room where lots of Axan relatives not her relatives not hers are doing stuff on lots of screens and talking to each other and doing their weird dances to the weird music. They look like gray grass. They come over and put their disgusting flipper on her and say welcome to the family. Todd's there, too, playing with gray kids with flipper and practically no hair, dancing. That social worker's gone.

Then it's dinner time. Sonya and the stupid Axan girl not her cousin have to sit at different ends of the big long table. HI turns on pretty music and pretty light. There's all kinds of People food and all kinds of Alayayxan—Axan food and Sonya's really hungry but she won't eat. Everybody else eats. Except Ib. Chchch just sits there not looking at Sonya.

Sonya climbs up on the table. Ib starts over to her and she has to hurry. She squeezes her eyes shut and puts her two hands around her mouth with the tongue in it and all the ten fingers spread out and yells, "Ugly Axans!" Ib stops.

It gets really really quiet except for Zama says her name wrong.

"I hate you!" She doesn't know how to say that in their stupid language. She knows how to say, "Axan Axan Axan Axan" like a wail.

Todd is crying really loud. One of the Axans cuddles him, shushes him. Zama reaches for Sonya with a zillion disgusting flipper things but she jumps away Axan Axan Axan and knocks food off the table and the mice bots whir around and Yoolie gets her.

Then it starts to sound like a big big storm with lightning and thunder and scary voices and thick dirty air and ice. Sonya can't breathe.

Yoolie jerks her off the table and carries her to her room. It used to be nice when Yoolie carried her. It's not nice now. The door opens when he tells it to. Now he's making some noise Sonya's never heard before, kind of whistling, kind of rattling, not from his ugly slanty mouth but from all over his ugly gray body sort of, like he's going to burn up like when something Sonya can't remember something a long long time ago blew up *boom!* She wouldn't talk to him even if he wanted her to. He doesn't even try. He just rattles and hisses and roars *boom!* He just sets her down and leaves her room. *The room.* It's not hers. She doesn't live here. Yoolie just leaves.

Voice sound all mad, but they're butthead flip voices so how can you tell? GoPHER brings her dinner. She doesn't want to eat it but she's hungry and it tastes good and she throws the rest of it even the mixl on the floor and she stomps on it. Boo's broken but she holds him anyway when she falls asleep. She wakes up and she's wet the bed and she's all alone and she goes back to sleep. GoPHER brings her breakfast and cleans up the food on the floor and puts on clean sheets and takes the smelly wet ones away. Sonya squats on the bed until some pee comes out again and some poop. It's disgusting. GoPHER comes in and puts on clean sheets and takes the smelly wet dirty ones away. Sonya yells "Axan" but GoPHER's just a bot and it doesn't care what she calls it.

Sonya sleeps.

Sonya wakes up. It looks like morning.

Four days.

Sonya's sorry.

They aren't ugly or stupid they're not Axans they're Alayayxans and she's People and she's their child. Brigl diomoni brigl diaymeni brigl.

GoPHER brings her breakfast. Her tummy hurts but she doesn't knock anything off. "Go get Yoolie," Sonya tells it. "Go get Yoolie, please."

GoPHER goes. She waits. Her tummy hurts.

Yoolie doesn't come. "House," says Sonya. "Music, please." Nothing happens.

Three and a half days. Sonya wants Zama to brush her hair. Sonya wants Yoolie. Sonya wants Ib. Sonya wants Todd.

Zama and Ib and Yoolie come in. Sonya's so glad. She says, "I'm sorry."

Zama curls down onto the bed. "Sonya, we have to talk."

No no "Will you brush my hair?"

"Listen to me," says Yoolie.

"Will you brush my hair for Adoption Day in three and a half days?" Zama doesn't say anything.

Ib says, "We can't—"

Yoolie says, "We aren't the right—"

Zama says, "We thought you wanted—"

Yoolie says, "—tried everything."

Ib says, "—best for everybody."

"Where's Todd? Where's my brother?"

That social worker comes and takes Sonya not Todd, Todd's going to be adopted in two days. Zama and Yoolie hug her and they're crying and rattling. Ib's not here. She wants chchch.

Where's her pen? Where's her smart pen? She's lost her pen. The house is quiet and there's no wailing and she can't find her pen.

Out of the house and down down down in the elevator and out into the big hot city with just one moon. Her tongue finds a bloody hole where her little white tooth used to be. It hurts.

That social worker says new school, new house, new friends. "Amalie?" Sonya whispers. "Puy?"

No answer. Maybe that social worker doesn't know that's their names. Maybe Sonya's saying their names wrong.

The new family's People. They can say "Sonya" right.

Where's Boo? Where's broken blue Boo? O

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# WATCH BEES

Philip Brewer

Philip Brewer's stories often involve genetic engineering and money—perhaps not surprising, as his parents are biologists and he has a degree in economics. Even before the current recession, his tales often touched on hard economic times.

Philip's work has appeared in *Futuristic*, *Lady Churchill's Rosebud Wristlet*, and *Redstone Science Fiction*. He speaks Esperanto and uses it for international communication.

"Watch Bees" is his first story for *Asimov's*.

Picking his way through morning glory vines, over rolling chunks of old pavement, David made his way to the edge of the ditch. Kneeling down, he got close enough to the dandelions and clover to see that the bees visiting them were striped the distinctive orange-and-black of watch bees.

Looking up, David took in the farm as a whole. The paint on the farmhouse and barn wasn't fresh, but it wasn't peeling. The garden was big. The fields grew food, not just biofuel crops. He was six or seven miles from town, having rejected each of the farms he'd passed, but this one looked promising.

After four years, he still marveled over how much better things had held up in Illinois. A stranger would never have been able to walk from town to his family's orchard in Michigan. If bandits didn't get him, he'd be stopped at the checkpoints set up to stop the bandits. If he were lucky he'd be taxed whatever cash he was carrying and then turned back. A little less lucky and he'd be taxed a bit more heavily and have his body tossed in someone's methane digester.

David was just two steps up the driveway when one of the bees noticed him. It moved close enough to brush his skin, then changed the pitch of its wingbeats to show it knew he was a stranger. As he continued up the drive, every bee he passed repeated the process. David shuddered each time.

Near the barn, two men worried over an old sprayer. They wore caps advertising hybrid seeds and hybrid tractors, and had the look of father and son—no surprise, given the watch bees.

The father glanced up at David's approach, then back down at the sprayer. "I think it's just this one O-ring, not a bad batch. The others look fine."

The younger man nodded. "I'll put in a different one."

"Good that you stopped, though. One bad seal can waste a lot of ammonia."

"Thanks, Pa."

The older man wiped his hands on his jeans and stepped around the sprayer toward David. "Whatcha selling, son?"

"Looking for work," David said.

"Can't use you," the farmer said, "On account of the bees. Raiders give us trouble, take you out along with them."

"There hasn't been as much problem with raiders lately," David said. "Not like it was three, four years ago when I got to the university. And I don't need a job long-term. I'd be willing to risk it."

"You're a student?"

"I just graduated."

"Degree?"

"Agriculture," David said, which was true enough.

"Why're you looking to hire on as a hand?"

David launched into the story he'd prepared. "My folks have a peach orchard up in Michigan. Got hit by a resistant twig borer and had to pay up for some fancy new insecticide." That was all true enough as well, except as an answer to the farmer's question.

"And you're looking to earn enough to buy a train ticket to Michigan? Because I can't afford—"

"Oh, no sir," David said. "Just looking to make a little over room and board. And the extra wouldn't have to be in cash. Maybe an old bicycle I could refurbish. It's less than 250 miles to home. With a bike, I could save my parents having to come up with the cash."

"Do have an old bike," the farmer admitted, not mentioning what a dangerous ride David was proposing. He put out a hand. "Name's Ezekiel Ware. Be willing to take you on, you sure you want to risk it with the bees."

David smiled. "I'm sure."

David didn't realize Ezekiel had a daughter until Mrs. Ware called the menfolk in for dinner.

He had spent the afternoon helping Zachariah move the cattle to fresh pasture, and then move the chickens to where the cows had been three days before. The cows seemed indifferent to the move, but the chickens were very excited to kick into the ripening cow patties, looking for grubs.

Her name was Naomi. She wore a pioneer dress, but left her head uncovered, her brown hair falling in loose curls past her shoulders. It was nothing like the way women dressed at the university, but also charmingly unconventional for rural Illinois.

A smudge of flour on her cheekbone suggested that she'd been working in the kitchen, but the first thing she said when her father came in was, "Pa, I spotted an odd divergence in ethanol futures prices between dollars and euros. I didn't know what it meant, so I reduced our exposure in both currencies."

"Kept enough to hedge our expected production?"

"Course, Pa." She glanced at her brother and rolled her eyes.

David wanted very much to hear more—about the ethanol market, about the farm's hedging strategies, about Naomi—but everyone was moving toward the dining table.

"Don't aim to produce much ethanol," Ezekiel said to David as they sat down. "Just what we need for here on the farm. But hate to come up short and have to buy on the market. Overshooting's better than undershooting."

Ezekiel bowed his head and launched into a long prayer, but David heard nothing of it, his attention fixed on the smudge of flour on Naomi's face. He just managed to look down in time to say "Amen" and look up with everyone else.

"Got to dust off the solar panels every day, Dave."

"Sorry, Zachariah," David said, moving to clean the panel that powered the pump that circulated water from the fishpond through the herbs.

Zachariah waved the apology away. "Pa especially praised that you went and checked the nitrogen levels in the water. Said it showed what a Ag degree was good for, that you did it on your own."

"I'm glad he was pleased."

"Finding that the system can support half again as many plants? You bet he's pleased. Now, come on—I want to fence off a few trees where the pigs have been getting into the roots."

"I was hoping," David said after they'd walked for a minute, "that you could show me a little about working with the bees."

"Sure, if you want. Pa figured you might want to keep away from them."

"No," David said, holding still while a bee brushed past his face, shivering as the shifting drone of its wings swelled in his ear. After the bee flew off he added, "I'd be pleased to learn."

"David," Naomi said, "do you know anything about anaerobic bacteria?"

The division of labor between the menfolk and the women meant that David scarcely saw Naomi except at the dinner table, so he was delighted that she'd come out to where he and Zachariah were splitting wood from a fallen tree.

"You mean like botulism and gangrene?" David asked, glad for a chance to talk to her, but wishing for a more pleasant topic.

Naomi grinned. "For methane production."

"Oh," David said. He shrugged, sorry she wasn't asking about something he had more expertise in. "Just the basics, I guess. We had a digester on our farm."

Naomi's face fell. "I'd hoped maybe you'd studied them. The production rate in our digester dropped by half, and I'm trying to figure out why."

"Half, but not to zero?" David pondered for a moment. "Do you use engineered methanogens?" At Naomi's nod he went on. "Maybe they died off and you're operating on natural anaerobic bacteria. That'd cut your production rate."

"How could we tell?" Naomi asked. "How could we fix it?"

"Fixing it would be easy. Just run your digester over-hot for a while to bring down the population of competing bacteria, then re-seed it with the engineered bacteria. But that's an expensive fix if it isn't your problem. I bet the manufacturer has a test."

Zachariah looked from his sister to David and back, then said, "Sounds like you've got some ideas. Pa wanted me to check the perimeter intrusion sensors, so I'll get to that."

Naomi dismissed him with a nod, then turned back to David, gesturing that they should head to the digester. "So, what else could it be?"

"Bad feedstock?" David suggested. "A leak in the digester, letting oxygen in?"

"Thank you Lord," Ezekiel began, "for the bountiful land and for all that grows on it."

David, his hands folded and head bowed, glanced past where Ezekiel sat to the framed picture overlooking the dining table. It was poster-sized, printed in vivid colors, and showed a light-skinned Jesus with two fingers raised and a glowing heart-shaped ruby on his chest.

"Thank you for your guidance in all things. We didn't buy a thermal depolymerization unit three years back, and that has saved us from a lot of the troubles the Powells are having. Bless Mr. Perkins for giving us his wise advice on the subject. Bless the men in Zachariah's unit serving in the Persian theater, and all their families. The gears on the red tractor are about shot, but if it is your will, they'll see us through harvest. Thank you for bringing us Dave, whose hard work this week has been a big help. Thank you that we are all together and healthy. Thank you for this food. Amen."

Everyone around the table echoed the last word, then began passing platters of biscuits and potatoes and beans and ham and kale and spinach both ways around the table.

Once everyone's plate was filled, Ezekiel said, "Zachariah tells me that you want to learn about beekeeping, Dave."

"Yes sir, I would."

"Why is that?"

"Bees are important on an orchard."

"That's right. Your family grows peaches, don't they?"

"Yes sir."

"So you must already have bees."

"The honey bees have never come back. We keep a lot of our land in non-crop flowering plants to support a year-round native bee population."

Naomi turned toward David. "I read that you have to mow the flowers at just the right time to encourage the bees to switch to peach blossoms."

Having her full attention on him made it hard to swallow. "That's right," he managed. "But you can't mow all the acres. You have to mow the right amount. And the right ones, or the bees pollinate more of your neighbor's crops than of yours."

"If it's so complicated to work with the native bees, why not get orange-and-blacks?"

David chose his words carefully. "In Illinois, hives were made available through the University Extension. In Michigan, they got marketed through companies that would only sell hives with non-propagating queens. They pollinate fine and they make honey, but you have to buy a new hive every few years when the queen dies. Nobody we know could afford it." He sat back in his chair, pleased with how he'd kept the focus on pollination and honey, and refrained from mentioning protection from raiders—protection that the commercially marketed hives didn't offer.

"Enough to make a man bitter," Ezekiel said.

David managed to dredge up a smile, putting aside memories of too many funerals for too many of his friends' fathers and uncles and brothers. "I don't hold it against Illinois. Or the university," he said. "Or I wouldn't have been able to spend four years here."

"If you were going to have European red mites," David said, looking along a branch covered with apple blossoms, "they'd be out already."

David had been trying to avoid the Wares' small orchard, but Ezekiel had specifically asked him to help Naomi check for pests.

"So, we're safe?" she asked.

"Looks like," David said.

Naomi took a step closer and put her hand on his chest. "Is something wrong?"

He wanted to tell her how it felt to watch the orange-and-blacks methodically visit each flower in turn, but it was too complicated. Did she know that apple trees grew branches thick with blossoms because they'd evolved with bees that were haphazard pollinators? That honey bees were such methodical pollinators that trees had to be specially pruned in order not to break under the weight of their own fruit? That orchards pruned that way were permanently disadvantaged when they had to make do with native bees?

That touching him had swept all his thoughts away in confusion?

"Being in the orchard," he said finally, "makes me think of home."

"Oh," Naomi said.

"See these extended cells?" Zachariah asked, pointing at the honeycomb. "They're where the workers are raising new queens. 'Course the first queen to emerge kills the others, so there's only a net increase of one queen."

"Just like honey bees," David said.

Zachariah nodded, but seemed distracted. After a moment he said, "Actually, I'm surprised with Pa letting you see this."

"Oh?"

"People tried to steal watch bees, back when they were new. Never heard of a success, but I do know of a lot of ruined hives. And more than a few thieves killed by the bees they tried to steal. Farmers got pretty cautious about sharing even basic information."

"I guess that makes sense," David said, letting his tone of voice indicate the opposite.

"No, Pa's right," Zachariah said. "No point in being secretive about basic beekeeping skills. People have known those since ancient Egypt."

"Really?" David almost laughed. It only now occurred to him that, for all the hours he'd spent reading papers by the scientists who'd engineered the watch bees, he hadn't really studied the earlier history of beekeeping.

"People have been keeping bees for at least four thousand years."

"That's all I'm trying to learn," David assured him. "I don't need to know the mechanisms of watch bee threat identification."

Zachariah frowned and didn't respond.

Realizing that he'd made Zachariah suspicious, David cast about for a distraction. Unable to think of anything better, he pulled the leg of his bee suit up, exposing half an inch of skin near his ankle. A bee quickly came to investigate, at which point he turned his foot so as to pinch the bee with the top of his boot. "Son of a bitch!"

"What?"

"Bee sting," David said, backing away from the hive. "Ankle."

"Let me see."

Zachariah knelt to look where David indicated. "Yep. I see the stinger."

"Well, pull it out! It fucking hurts."

"You don't pull them out. That just squeezes more poison in. You want to scrape them out, like this."

"Shit!"

"Okay. It's out. But you need to head back to the house. The venom includes signaling proteins that attract other bees. The rule is anybody who gets stung needs to stay away from the hives for twenty-four hours."

As he headed toward the house, David cursed silently to himself. He'd meant what he'd said to reduce suspicion by making a show of ignorance, but it had clearly backfired.

He didn't need to ask about threat identification mechanisms. He already knew.

The screened-in porch had been made secure against the bees. Clearly having such a space was a basic safety precaution.

Mrs. Ware brought him dinner, and then later brought a pillow and a couple of blankets. "The lounge chair doesn't make a great bed, but it'll be okay for a night, don't you think?"

He assured her it would be fine, but he was still awake more than an hour after everyone had gone upstairs and the house was dark and quiet.

So he was awake when Naomi came.

The nightgown she wore was ankle-length with a high collar, but the fabric was so sheer that even moonlight shone through it, showing David the curve of her body.

She moved to the foot of the lounge chair and shifted the blanket enough to expose his foot. She knelt down, tilting her head to let the moonlight fall on the spot where he'd been stung. She leaned forward to kiss his wound, letting her lips linger there for a long moment. Then, swinging one leg over the lounge chair, she knelt down over him and leaned forward again, this time to kiss his mouth.

Afraid even to whisper for fear of attracting her father or brother, David wrapped his arms around her and drew her close.

Mrs. Ware brought breakfast out to the porch early.

David ate, thinking of Naomi. Thinking of her skin—cool in the night air, then hot against him. Thinking of how the tiniest movements of her lips could change her grin from shy to bold, from mischievous to saucy.

She had stayed for a long time. They'd both slept, despite the discomforts of the lounge chair, waking only when the birds began to stir. Then she'd crept away back into the house, pausing only a moment to laugh silently at his anxiety over the risk that she'd be discovered with him.

He'd slept fitfully after that, the earlier deep relaxation having fled.

Some time around mid-morning Ezekiel came. He stood outside the porch, staring in through the screen, the look on his face angry and disappointed. David glanced around and was a little surprised not to see Zachariah standing nearby with a shotgun. But then, there was no need for a gun. Opening the screen door would be as good as shooting him.

After a long time Ezekiel finally spoke. "A lot of people have tried to steal the watch bee biotech."

"What?" An initial flood of relief was immediately washed away at the thought of how his carelessness had aroused Zachariah's suspicions. "Mr. Ware, I—"

Ezekiel cut him off with a sharp gesture. "It's impossible. If they don't recognize you, having them puts *you* in as much danger as the attacker. Even if you could solve that, the watch bees are part of a system. You need all the pieces, or it doesn't work."

David said nothing, but couldn't keep what he knew about the failed attempts—dead hives and dead thieves—from running through his mind.

Ezekiel waited a long moment, then smiled humorlessly and said, "Let's pretend you said, 'Pieces? What pieces?' Then I can point out that you already mentioned one—threat identification. More: How to add a family member. How to remove a family member, if there's an acrimonious divorce. Must be a way, but someone who had *that* piece would be in a position to set the watch bees against their own household, so that's another: How to guard against that. Got to know or you're in constant danger. Sometimes, like to sell a farm, you need to know how to stand down the whole thing. There are *layers*. There's a *system*. Stealing it doesn't work. It's never worked. But sometimes it gets the thieves dead."

Ezekiel left after that, leaving David alone with his thoughts.

To distract himself, David stared obsessively through the screen, watching the bees. For their part, the bees carried on as usual, showing no special interest in getting in, unlike a couple of yellow jackets that buzzed persistently at the screen.

Ezekiel kept a close watch on David as the queens approached maturity, but once the bees had swarmed and been moved to new hives, he relaxed a good bit. He showed a polite interest in David's reports of his family's progress in raising the cash to buy him a ticket home, and in the meantime helped him get a bicycle in shape for making the trip that way. He'd gone so far as to pay hard cash to buy new tires and inner tubes. Once the bike was roadworthy, David returned the favor by using it to run errands for the farm.

Stealing a queen, David knew, was exactly the wrong strategy. The thing to steal was a frame with a large number of larvae.

He kept tabs on the hives, looking for a frame with at least twelve very young larvae. By late June there were candidate frames each day, and David had gathered most of the supplies he needed for the trip home. But rather than committing to a frame—killing most of the youngest larvae to free up the royal jelly he'd need to turn a few remaining ones into queens—he'd convinced himself that he might get a better frame if he waited another day or two.

When he admitted it to himself, though, his staying had as much to do with the extra mobility of having his own bike. That, together with the reduced scrutiny, meant he had an occasional chance to spend a few delicious minutes alone with Naomi.

The sign said tavern, but it seemed to be a restaurant as much as a bar, with as many women and children as there were men. Half the space was taken up with a wedding party, farm families dressed up in their Sunday best.

Ezekiel had brought David and the family into town and sent everyone off on some

errand or another. David's errand had apparently been much more quickly resolved than anyone else's.

David had just declined the bartender's third invitation to order something when an old woman detached herself from the wedding party and sat down at his table. "I'm going to hide myself back here. That okay with you?"

David nodded.

She was shrunken like a crone with rings in her eyebrow, nose, and lip. Her sleeveless shirt exposed arms and shoulders covered with tattoos made indecipherable by skin as wrinkled as crepe paper. "It's not that I'm not glad to see my fool godson smarten up enough to marry Rebecca. But if I have to listen to one more speech about the merging of two families, I'm going to hurl."

David smiled.

"You're a quiet fellow. Tell me what you're thinking and I'll buy you a beer." Without waiting for a reply, she gestured to the bartender.

David had been thinking that he was unlikely to find frames with more larvae than the ones he'd seen that morning, but it didn't seem wise to mention that. But when he tried to come up with a plausible lie, his mind went blank. Then one of the wedding party stood up, raised a glass and, just as the old woman had foretold, started talking about the merging of two families.

"That's what I was thinking about," David blurted. "How does marriage work when you've got watch bees? Whichever spouse moved to the other family's farm would be in deadly danger, right?"

"Yep," the old woman said. "Takes two generations of queens to add skin cell surface markers for a new person to the hive's family exception list. And then you have to wait for all the old worker bees to die before the new person's really safe. The delay has produced some interesting marriage customs among Illinois farmers."

"That's interesting," David said.

The old woman snorted a laugh. "If you're thinking about proposing to a farmer's daughter, I suppose it is. Otherwise, not so much."

David heard gravel crunch and looked up to see an expensive hybrid motorcycle rolling up the driveway.

Ezekiel, pushing the spool mower, hadn't heard it. David touched him on the arm, then gestured with his rake.

The bike carried a man and woman. The man wore mismatched Chinese and Persian army surplus, the woman a pioneer dress over tight-fitting biker leathers and a full-face helmet. Only as the woman shifted to let the man off the bike did David see that she carried a baby in a sling on her back.

Ezekiel muttered something about perdition, then said, "Leave what you're doing. Don't let them between you and the house."

David moved to comply.

"Excuse me, farmer," the man said. "My wife and I are trying to get to her family, out near Springfield. I was hoping you could spare a little fuel."

"Sorry," Ezekiel said. "We just have what we need to run the farm."

The man sighed. "We don't need much. If you could spare just a quart, that would see us all the way. Any liquid fuel—ethanol, methanol, diesel, vegetable oil, gasoline . . . Even just a pint would help a lot."

Ezekiel shook his head. "If you and your wife are hungry, we can give you some food."

"No," the man said, shaking his head. "We're not hungry." He turned back to his bike and David began to relax a little.

Then the man whirled around with a pistol in his hand and aimed it at Ezekiel. "If you've got enough for a tractor, you can spare a quart."

David heard a shift in the tone the bees made, knew they were responding to the scent of gun oil, fear markers in Ezekiel's sweat, the growing number of strangers, and probably other factors he hadn't managed to tweeze out of the documents he'd read.

As the man kept the pistol leveled, the woman settled a beekeeper's hat over his head, arranging the netting to fall to his shoulders. That done, she pulled a larger piece of netting out and draped it over her helmet to cover herself and the baby.

Ezekiel spoke in a gentle tone, but pitched his voice to carry. "Dave? Run. The screened-in porch. It'll be the only safe place."

Having heeded Ezekiel's earlier advice, David had a straight shot toward the house. He turned and ran. Out of the corner of his eye he saw Ezekiel sprint off at a different angle. He heard the crack of a shot and saw Ezekiel throw himself into the ditch.

The drone of the watch bees swelled. It started behind him, then spread across the farm like water poured out on hard ground. In just a few seconds it was so loud he couldn't hear his footsteps as he sprinted through the grass. Knowing that taking cover from the gunfire would be suicidal, David tried to pick up the pace.

Behind him, the man screamed.

This first shout of pain was followed quickly by another gunshot. Already running as fast as he could, David did his best to dodge a little left and right, but that shot turned out to be the last.

The screaming, though, went on. The woman's voice joined in. In the thirty seconds it took David to run to the farmhouse, he heard the quality of the screams shift—from pain to anger to pleading.

The pleading seemed to go on for a long time, cutting through even the terrifying drone of angry watch bees. David was glad he was too far away to make out any words.

Finally he reached the screened-in porch, rushed inside, and closed and latched the door.

Zachariah, arriving only moments after David, pulled at the door. Surprised that it wouldn't open, he prepared to yank harder.

"No!" David said, gasping as he tried to catch his breath. "Don't open the door."

Zachariah, a look of comprehension in his eyes, gingerly let go of the handle. "What happened?"

"A family. On a motorcycle. Wanted fuel. Pulled a gun."

Looking out across the field, David could see the lawn mower, but no people. Bees filled the air with orange and black.

"Father?"

"Dived into a ditch when the shooting started."

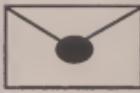
Naomi appeared from around the corner of the house carrying a .30-30. Wordless, she handed it to Zachariah, who worked the action to chamber a round, but had no target.

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Then they heard the wail of an infant in pain.

"They had a baby?" Zachariah asked. He sprinted after Naomi, who had started running at the first sound.

Ezekiel stood and hurried to where the baby was screaming.

From where he stood inside the screened-in porch, David could see the three of them struggling to free the baby from its harness and arrange the netting for better protection. Naomi grabbed the small bundle and raced toward the house, but the baby's cries had already turned to strangled wheezes.

By the time she reached the house, the baby had been silent for a long time.

David spent the night on the porch, listening to the bees, their hum still angry. It took him hours to fall asleep.

The first hour, he couldn't stop thinking about the baby. Naomi had gotten it close enough to the house that he'd been able to hear its last choking gasps. From where he'd been trapped on the porch, he'd heard Ezekiel shout for the bee-sting kit, imagined Mrs. Ware administering useless shots of adrenaline and antihistamine.

But the infant's death had only kept his attention for so long. Gradually his thoughts shifted. He'd started thinking about what would have happened if his own family had suffered a similar attack. What *had* happened—the time Grandpa got killed, the time Uncle Walter lost an arm.

When he woke, shortly before dawn, the angry drone was gone. Cautiously, he unlatched the porch door and stepped out. First one bee approached and then another. When neither stung, David let the screen door close behind him. He walked down the drive.

The bodies lay where they'd fallen. Every visible inch of skin was red and swollen.

The swellings seemed somehow odd, but only after a long moment of peering at them did David realize what it was. There were no stingers left behind. Overcoming a bit of morbid squeamishness, he rolled the man's body over. Underneath it, he found what he knew he'd find—wasps.

Several had been crushed by the raider's death throes. There was nothing remarkable about them—they were yellow and black like ordinary yellow jackets, not orange and black like the engineered bees. But David had no doubt that they were engineered as well. In fact, some obscure references in the academic papers he'd read made a great deal more sense now. Larger and stronger than bees, with longer, sharper stingers, it made sense that they were the deadly part of the system.

The watch bees were like the magician's dramatic flourish, drawing your attention away from the real action.

David left without leaving a note, unwilling to risk that it would be found before his train had departed.

He'd dug the grave for the raiders, and had chosen a site as close to a yellow jacket nest as he dared to dig, using the opportunity to do most of the digging required to take the nest.

Bees had been bred for four thousand years to tolerate human interference with their hives. Wasps had undergone no such breeding. In lieu of it, David nailed a screen down over the entrance of the nest. Working quickly, he finished the digging. Pulling up a plug of earth that included the entire nest, he lowered it into a five-gallon bucket. He'd already punched air holes in the lid. Now he put a layer of screen over the bucket, then the lid, and then used duct tape to add another layer of screen.

That done, he moved on to the bees. He surveyed the frames and took the most likely, killing all but a few of the youngest larvae to preserve the royal jelly he'd need.

Early in his preparations, he'd taken a suitcase suitable for train travel and built

into it a box for carrying a hive frame. The bucket would be more awkward, but he figured his budget could be stretched enough to buy a suitcase that would hold it. It was little enough on top of the money his family and neighbors had raised to send him to college for four years.

He'd previously timed the ride to the station. Even with the awkward luggage he bested it, arriving in good time for the early train. He paid for his tickets with cash he'd kept hidden, boarded, and within minutes was on his way home to Michigan.

On the train, he wrote the note he'd been afraid to leave behind.

He told Naomi he loved her. Tearing that note up left him with just one piece of paper, making him hesitate. Finally, he wrote of the half hour they'd spent checking the family's orchard for European red tree mites, saying that her gentle understanding when he'd expressed concern for his family had meant more to him than he could say.

He'd mail it from Chicago. It'd probably get through.

It would be two generations of bees before his family's farm would be as safe as the farms of Illinois. Every two generations after that would see two, and then four, and then eight more of his neighbors' farms protected as well.

As the train rolled north he imagined that he could hear the drone of watch bees protecting his home. ○

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Michael Swanwick's latest book, *Dancing With Bears, The Post-utopian Adventures of Darger and Surplus*, has just come out from Night Shade Books. "This is the big event when the two strangely lovable rogues (first encountered in Asimov's, "The Dog Said Bow-Wow," October/November 2001) finally reach Moscow to run the scam of their lives on the Duke of Muscovy. Will they succeed? Is Russia bigger and tougher than they are? Will they manage to avoid burning Moscow to the ground? My lips are sealed." While Russia may or may not be burning, it's Ireland that Michael chooses to devastate in . . .

# FOR I HAVE LAIN ME OOWN ON THE STONE OF LONELINESS ANO I'LL NOT BE BACK AGAIN

Michael Swanwick

*Ich am of Irlaunde,  
And of the holy londe  
Of Irlande.  
Gode sire, pray ich the,  
For of saynte chairité  
Come ant daunce with me  
In Irlaunde.  
(anon.)*

The bullet scars were still visible on the pillars of the General Post Office in Dublin, almost two centuries after the 1916 uprising. That moved me more than I

had expected. But what moved me even more was standing at the exact same spot, not two blocks away, where my great-great-grandfather saw Gerry Adams strolling down O'Connell Street on Easter morning of '96, the eightieth anniversary of that event, returning from a political rally with a single bodyguard to one side of him and a local politico to the other. It gave me a direct and simple connection to the tangled history of that tragic land.

I never knew my great-great-grandfather, but my grandfather told me that story once and I've never forgotten it, though my grandfather died when I was still a boy. If I squeeze my eyes tight shut, I can see his face, liquid and wavy as if glimpsed through candle flames, as he lay dying under a great feather comforter in his New York City railroad flat, his smile weak and his hair forming a halo around him as white as a dandelion waiting for the wind to purse its lips and blow.

"It was doomed from the start," Mary told me later. "The German guns had been intercepted and the republicans were outnumbered fourteen to one. The British cannons fired on Dublin indiscriminately. The city was afire and there was no food to be had. The survivors were booed as they were marched off to prison and execution, for the common folk did not support them. By any conventional standard it was a fiasco. But once it happened, our independence was assured. We lose and we lose and we lose, but because we never accept it, every defeat and humiliation only leads us closer to victory."

Her eyes *blazed*.

I suppose I should tell you about Mary's eyes, if you're to understand this story. But if I'm to tell you about her eyes, first I have to tell you about the holy well.

There is a holy well in the Burren that, according to superstition, will cure a toothache. The Burren is a great upwelling of limestone in the west of County Clare, and it is unlike anyplace else on Earth. There is almost no soil. The ground is stony and the stone is weathered in a network of fissures and cracks, called grykes, within which grow a province of plants you will not find in such abundance elsewhere. There are caves in great number to the south and the east, and like everywhere else in that beautiful land, a plenitude of cairns and other antiquities to be found.

The holy well is one such antiquity, though it is only a round hole, perhaps a foot across, filled with water and bright green algae. The altar over it is of recent construction, built by unknown hands from the long slender stones formed by the natural weathering of the limestone between the grykes, which makes the local stone walls so distinctive and the walking so treacherous. You could tear it down and scatter its component parts and never hear a word spoken about your deed. But if you returned a year later you'd find it rebuilt and your vandalism unmade as if it had never happened. People have been visiting the well for a long, long time. The Christian overlay—the holy medals and broken statues of saints that are sometimes left as offerings, along with the prescription bottles, nails, and coins—is a recent and perhaps a transient phenomenon.

But the important thing to know, and the reason people keep coming back to it, is that the holy well works. Some holy wells don't. You can locate them on old maps, but when you go to have a look, there aren't any offerings there. Something happened long ago—they were cursed by a saint or defiled by a sinner or simply ran out of mojo—and the magic stopped happening, and the believers went away and never returned. This well, however, is charged with holy power. It gives you shivers just to stand by it.

Mary's eyes were like that. As green as the water in that well, and as full of dangerous magic.

I knew about the holy well because I'd won big and gotten a ticket off-planet, and so before I went, I took a year off in order to see all the places on Earth I would nev-

er return to, ending up with a final month to spend wandering about the land of my ancestors. It was my first time in Ireland and I loved everything about it, and I couldn't help fantasizing that maybe I'd do so well in the Outsider worlds that someday I'd be rich enough to return and maybe retire there.

I was a fool and, worse, I didn't know it.

We met in the Fiddler's Elbow, a pub in that part of the West which the Bord Failte calls Yeats Country. I hadn't come in for music but only to get out of the rain and have a hot whiskey. I was sitting by a small peat fire, savoring the warmth and the sweet smell of it, when somebody opened a door at the back of the room and started collecting admission. There was a sudden rush of people into the pub and so I carried my glass to the bar and asked, "What's going on?"

"It's Maire na Raghallach," the publican said, pronouncing the last name like Reilly. "At the end of a tour she likes to pop in someplace small and give an unadvertised concert. You want to hear, you'd best buy a ticket now. They're not going to last."

I didn't know Maire na Raghallach from Eve. But I'd seen the posters around town and I figured what the hell. I paid and went in.

Maire na Raghallach sang without a backup band and only an amp-and-finger-rings air guitar for instrumentation. Her music was . . . well, either you've heard her and know or you haven't and if you haven't, words won't help. But I was mesmerized, ravished, rapt. So much so that midway through the concert, as she was singing "Deirdre's Lament," my head swam and a buzzing sensation lifted me up out of my body into a waking dream or hallucination, or maybe vision is the word I'm looking for. All the world went away. There were only the two of us facing each other across an vast plain of bones. The sky was black and the bones were white as chalk. The wind was icy cold. We stared at each other. Her eyes pierced me like a spear. They looked right through me, and I was lost, lost, lost. I must have been half in love with her already. All it took was her noticing my existence to send me right over the edge.

Her lips moved. She was saying something and somehow I knew it was vastly important. But the wind whipped her words away unheard. It was howling like a banshee with all the follies of the world laid out before it. It screamed like an electric guitar. When I tried to walk toward her, I discovered I was paralyzed. Though I strained every muscle until I thought I would splinter my bones trying to get closer, trying to hear, I could not move nor make out the least fraction of what she was telling me.

Then I was myself again, panting and sweating and filled with terror. Up on the low stage, Mary (as I later learned to call her) was talking between songs. She grinned cockily and with a nod toward me said, "This one's for the American in the front row."

And then, as I trembled in shock and bewilderment, she launched into what I later learned was one of her own songs, "Come Home, the Wild Geese." The Wild Geese were originally the soldiers who left Ireland, which could no longer support them, to fight for foreign masters in foreign armies everywhere. But over the centuries the term came to be applied to everyone of Irish descent living elsewhere, the children and grandchildren and great-great-great-grandchildren of those unhappy emigrants whose luck was so bad they couldn't even manage to hold onto their own country and who had passed the guilt of that down through the generations, to be cherished and brooded over by their descendants forever.

"This one's for the American," she'd said.

But how had she known?

The thing was that, shortly after hitting the island, I'd bought a new set of clothes

locally and dumped all my American things in a charity recycling device. Plus, I'd bought one of those cheap neuroprogramming pendants that actors use to temporarily redo their accents. Because I'd quickly learned that in Ireland, as soon as you're pegged for an American, the question comes out: "Looking for your roots, then, are ye?"

"No, it's just that this is such a beautiful country and I wanted to see it."

Skeptically, then: "But you do have Irish ancestors, surely?"

"Well, yes, but . . ."

"Ahhh." Hoisting a pint preparatory to draining its lees. "You're looking for your roots, then. I thought as much."

But if there's one thing I *wasn't* looking for, it was my fucking roots. I was eighth-generation American Irish and my roots were all about old men in dark little Boston pubs killing themselves a shot glass at a time, and the ladies of Noraid goose-stepping down the street on Saint Patrick's Day in short black skirts, their heels crashing against the street, a terrifying irruption of fascism into a day that was otherwise all kitsch and false sentiment, and corrupt cops, and young thugs who loved sports and hated school and blamed the blacks and affirmative action for the lousy construction-worker jobs they never managed to keep long. I'd come to this country to get away from all that, and a thousand things more that the Irish didn't know a scrap about. The cartoon leprechauns and the sentimental songs and the cute sayings printed on cheap tea towels somehow all adding up to a sense that you've lost before you've even begun, that it doesn't matter what you do or who you become, because you'll never achieve or amount to shit. The thing that sits like a demon in the dark pit of the soul. That Irish darkness.

So how had she known I was an American?

Maybe it was only an excuse to meet her. If so, it was as good an excuse as any. I hung around after the show, waiting for Mary to emerge from whatever dingy space they'd given her for a dressing room, so I could ask.

When she finally emerged and saw me waiting for her, her mouth turned up in a way that as good as said, "Gotcha!" Without waiting for the question, she said, "I had only to look at you to see that you had prenatal genework. The Outsiders shared it with the States first, for siding with them in the war. There's no way a young man your age with everything about you perfect could be anything else."

Then she took me by the arm and led me away to her room.

We were together how long? Three weeks? Forever?

Time enough for Mary to take me everywhere in that green and haunted island. She had the entirety of its history at her fingertips, and she told me all and showed me everything and I, in turn, learned nothing. One day we visited the Portcoon sea cave, a gothic wave-thunderous place that was once occupied by a hermit who had vowed to fast and pray there for the rest of his life and never accept food from human hands. Women swam in on the tides, offering him sustenance, but he refused it. "Or so the story goes," Mary said. As he was dying, a seal brought him fish and, the seal not being human and having no hands, he ate. Every day it returned and so kept him alive for years. "But what the truth may be," Mary concluded, "is anyone's guess."

Afterward, we walked ten minutes up the coast to the Giant's Causeway. There we found a pale blue, four-armed alien in a cotton smock and wide straw hat painting a watercolor of the basalt columns rising and falling like stairs into the air and down to the sea. She held a brush in one right hand and another in a left hand, and plied them simultaneously.

"Soft day," Mary said pleasantly.

"Oh! Hello!" The alien put down her brushes, turned from her one-legged easel.

She did not offer her name, which in her kind—I recognized the species—was never spoken aloud. “Are you local?”

I started to shake my head but, “That we be,” Mary said. It seemed to me that her brogue was much more pronounced than it had been. “Enjoying our island, are ye?”

“Oh, yes. This is such a beautiful country. I’ve never seen such greens!” The alien gestured widely with all four arms. “So many shades of green, and all so intense they make one’s eyes ache.”

“It’s a lovely land,” Mary agreed. “But it can be a dirty one as well. You’ve taken in all the sights, then?”

“I’ve been everywhere—to Tara, and the Cliffs of Moher, and Newgrange, and the Ring of Kerry. I’ve even kissed the Blarney Stone.” The alien lowered her voice and made a complicated gesture that I’m guessing was the equivalent of a giggle. “I was hoping to see one of the little people. But maybe it’s just as well I didn’t. It might have carried me off to a fairy mound and then after a night of feasting and music I’d emerge to find that centuries had gone by and everybody I knew was dead.”

I stiffened, knowing that Mary found this kind of thing offensive. But she only smiled and said, “It’s not the wee folk you have to worry about. It’s the boys.”

“The boys?”

“Aye. Ireland is a hotbed of nativist resistance, you know. During the day, it’s safe enough. But the night belongs to the boys.” She touched her lips to indicate that she wouldn’t speak the organization’s name out loud. “They’ll target a lone Outsider to be killed as an example to others. The landlord gives them the key to her room. They have ropes and guns and filthy big knifes. Then it’s a short jaunt out to the bogs, and what happens there . . . Well, they’re simple, brutal men. It’s all over by dawn and there are never any witnesses. Nobody sees a thing.”

The alien’s arms thrashed. “The tourist officials didn’t say anything about this!”

“Well, they wouldn’t, would they?”

“What do you mean?” the alien asked.

Mary said nothing. She only stood there, staring insolently, waiting for the alien to catch on to what she was saying.

After a time, the alien folded all four of her arms protectively against her thorax. When she did, Mary spoke at last. “Sometimes they’ll give you a warning. A friendly local will come up to you and suggest that the climate is less healthy than you thought, and you might want to leave before nightfall.”

Very carefully, the alien said, “Is that what’s happening here?”

“No, of course not.” Mary’s face was hard and unreadable. “Only, I hear Australia’s lovely this time of year.”

Abruptly, she whirled about and strode away so rapidly that I had to run to catch up to her. When we were well out of earshot of the alien, I grabbed her arm and angrily said, “What the fuck did you do *that* for?”

“I really don’t think it’s any of your business.”

“Let’s just pretend that it is. Why?”

“To spread fear among the Outsiders,” she said, quiet and fierce. “To remind them that Earth is sacred ground to us and always will be. To let them know that while they may temporarily hold the whip, this isn’t their planet and never will be.”

Then, out of nowhere, she laughed. “Did you see the expression on that skinny blue bitch’s face? She practically turned green!”

“Who are you, Mary O’Reilly?” I asked her that night, when we were lying naked and sweaty among the tangled sheets. I’d spent the day thinking, and realized how little she’d told me about herself. I knew her body far better than I did her mind. “What are your likes and dislikes? What do you hope and what do you fear? What

made you a musician, and what do you want to be when you grow up?" I was trying to keep it light, seriously though I meant it all.

"I always had the music, and thank God for that. Music was my salvation."

"How so?"

"My parents died in the last days of the war. I was only an infant, so they put me in an orphanage. The orphanages were funded with American and Outsider money, part of the campaign to win the hearts and minds of the conquered peoples. We were raised to be denationalized citizens of the universe. Not a word of Irish touched our ears, nor any hint of our history or culture. It was all Greece and Rome and the Aldebaran Unity. Thank Christ for our music! They couldn't keep that out, though they tried hard to convince us it was all harmless doodle-doodle jigs and reels. But we knew it was subversive. We knew it carried truth. Our minds escaped long before our bodies could."

We, she'd said, and *us* and *our*. "That's not who you are, Mary. That's a political speech. I want to know what you're really like. As a person, I mean."

Her face was like stone. "I'm what I am. An Irishwoman. A musician. A patriot. Cooze for an American playboy."

I kept my smile, though I felt as if she'd slapped me. "That's unfair."

It's an evil thing to have a naked woman look at you the way Mary did me. "Is it? Are you not abandoning your planet in two days? Maybe you're thinking of taking me along. Tell me, exactly how does that work?"

I reached for the whiskey bottle on the table by the bed. We'd drunk it almost empty, but there was still a little left. "If we're not close, then how is that my fault? You've known from the start that I'm mad about you. But you won't even—oh, fuck it!" I drained the bottle. "Just what the hell do you want from me? Tell me! I don't think you can."

Mary grabbed me angrily by the arms and I dropped the bottle and broke her hold and seized her by the wrists. She bit my shoulder so hard it bled and when I tried to push her away, toppled me over on my back and clambered up on top of me.

We did not so much resolve our argument as fuck it into oblivion.

It took me forever to fall asleep that night. Not Mary. She simply decided to sleep and sleep came at her bidding. I, however, sat up for hours staring at her face in the moonlight. It was all hard planes and determination. A strong face but not one given to compromise. I'd definitely fallen in love with the wrong woman. Worse, I was leaving for distant worlds the day after tomorrow. All my life had been shaped toward that end. I had no Plan B.

In the little time I had left, I could never sort out my feelings for Mary, much less hers for me. I loved her, of course, that went without saying. But I hated her bullying ways, her hectoring manner of speech, her arrogant assurance that I would do whatever she wanted me to do. Much as I desired her, I wanted nothing more than to never see her again. I had all the wealth and wonders of the universe ahead of me. My future was guaranteed.

And, God help me, if she'd only asked me to stay, I would have thrown it all away for her in an instant.

In the morning, we took a hyperrapid to Galway and toured its vitrified ruins. "Resistance was stiffest in the West," Mary said. "One by one all the nations of the Earth sued for peace, and even in Dublin there was talk of accommodation. Yet we fought on. So the Outsiders hung a warship in geostationary orbit and turned their strange weapons on us. This beautiful port city was turned to glass. The ships were blown against the shore and broke on the cobbles. The cathedral collapsed under its own weight. Nobody has lived here since."

The rain spattered to a stop and there was a brief respite from the squalls which in that part of the country come off the Atlantic in waves. The sun dazzled from a hundred crystalline planes. The sudden silence was like a heavy hand laid unexpectedly upon my shoulder. "At least they didn't kill anyone," I said weakly. I was of a generation that saw the occupation of the Outsiders as being, ultimately, a good thing. We were healthier, richer, happier, than our parents had been. Nobody worried about environmental degradation or running out of resources anymore. There was no denying we were physically better off for their intervention.

"It was a false mercy that spared the citizens of Galway from immediate death and sent them out into the countryside with no more than the clothes on their backs. How were they supposed to survive? They were doctors and lawyers and accountants. Some of them reverted to brigandry and violence, to be sure. But most simply kept walking until they lay down by the side of the road and died. I can show you as many thousand hours of recordings of the Great Starvation as you can bring yourself to stomach. There was no food to be had, but thanks to the trinkets the Outsiders had used to collapse the economy, everybody had cameras feeding right off their optic nerves, saving all the golden memories of watching their children die."

Mary was being unfair—the economic troubles hadn't been the Outsiders' doing. I knew because I'd taken economics in college. History, too, so I also knew that the war had, in part, been forced upon them. But though I wanted to, I could not adequately answer her. I had no passion that was the equal of hers.

"Things have gotten better," I said weakly. "Look at all they've done for . . ."

"The benevolence of the conqueror, scattering coins for the peasants to scrabble in the dust after. They're all smiles when we're down on our knees before them. But see what happens if one of us stands up on his hind legs and tells them to sod off."

We stopped in a pub for lunch and then took a hopper to Gartan Lough. There we bicycled into the countryside. Mary led me deep into land that had never been greatly populated and was still dotted with the ruins of houses abandoned a quarter-century before. The roads were poorly paved or else dirt, and the land was so beautiful as to make you weep. It was a perfect afternoon, all blue skies and fluffy clouds. We labored up a hillside to a small stone chapel that had lost its roof centuries ago. It was surrounded by graves, untended and overgrown with wildflowers.

Lying on the ground by the entrance to the graveyard was the Stone of Loneliness.

The Stone of Loneliness was a fallen menhir or standing stone, something not at all uncommon throughout the British Isles. They'd been reared by unknown people in Megalithic times for reasons still not understood, sometimes arranged in circles, and other times as solitary monuments. There were faded cup-and-ring lines carved into what had been the stone's upper end. And it was broad enough that a grown man could lie down on it. "What should I do?" I asked.

"Lie down on it," Mary said.

So I did.

I lay down upon the Stone of Loneliness and closed my eyes. Bees hummed lazily in the air. And, standing at a distance, Mary began to sing:

*The lions of the hills are gone  
And I am left alone, alone . . .*

It was "Deirdre's Lament," which I'd first heard her sing in the Fiddler's Elbow. In Irish legend, Deirdre was promised from infancy to Conchubar, the king of Ulster. But, as happens, she fell in love with and married another, younger man. Naoise, her husband, and his brothers Ardan and Ainnle, the sons of Uisnech, fled with her to Scotland, where they lived in contentment. But the humiliated and vengeful old king

lured them back to Ireland with promises of amnesty. Once they were in his hands, he treacherously killed the three sons of Uisnech and took Deirdre to his bed.

*The falcons of the wood are flown*

*And I am left alone, alone . . .*

Deirdre of the Sorrows, as she is often called, has become a symbol for Ireland herself—beautiful, suffering from injustice, and possessed of a happy past that looks likely to never return. Of the real Deirdre, the living and breathing woman upon whom the stories were piled like so many stones on a cairn, we know nothing. The legendary Deirdre's story, however, does not end with her suicide, for in the aftermath of Conchubar's treachery wars were fought, the injustices of which led to further wars. Which wars continue to this very day. It all fits together suspiciously tidily.

It was no coincidence that Deirdre's father was the king's storyteller.

*The dragons of the rock are sleeping*

*Sleep that wakes not for our weeping . . .*

All this, however, I tell you after the fact. At the time, I was not thinking of the legend at all. For the instant I lay down upon the cold stone, I felt all the misery of Ireland flowing into my body. The Stone of Loneliness was charmed, like the well in the Burren. Sleeping on it was said to be a cure for homesickness. So, during the Famine, emigrants would spend their last night atop it before leaving Ireland forever. It seemed to me, prone upon the menhir, that all the sorrow they had shed was flowing into my body. I felt each loss as if it were my own. Helplessly, I started to sob and then to weep openly. I lost track of what Mary was singing, though her voice went on and on. Until finally she sang

*Dig the grave both wide and deep*

*Sick I am, and fain would sleep*

*Dig the grave and make it ready*

*Lay me on my true Love's body*

and stopped. Leaving a silence that echoed on and on forever.

Then Mary said, "There's someone I think you're ready to meet."

Mary took me to a nondescript cinder-block building, the location of which I will take with me to the grave. She led the way in. I followed nervously. The interior was so dim I stumbled on the threshold. Then my eyes adjusted, and I saw that I was in a bar. Not a pub, which is a warm and welcoming public space where families gather to socialize, the adults over a pint and the kiddies drinking their soft drinks, but a bar—a place where men go to get drunk. It smelled of potcheen and stale beer. Somebody had ripped the door to the bog off its hinges and no one had bothered to replace it. Presumably Mary was the only woman to set foot in the place for a long, long time.

There were three or four men sitting at small tables in the gloom, their backs to the door, and a lean man with a bad complexion at the bar. "Here you are then," he said without enthusiasm.

"Don't mind Liam," Mary said to me. Then, to Liam, "Have you anything fit for drinking?"

"No."

"Well, that's not why we came anyway." Mary jerked her head toward me. "Here's the recruit."

"He doesn't look like much."

"Recruit for what?" I said. It struck me suddenly that Liam was keeping his hands below the bar, out of sight. Down where a hard man will keep a weapon, such as a cudgel or a gun.

"Don't let his American teeth put you off. They're part of the reason we wanted him in the first place."

"So you're a patriot, are you, lad?" Liam said in a voice that indicated he knew good and well that I was not.

"I have no idea what you're talking about."

Liam glanced quickly at Mary and curled his lip in a sneer. "Ahh, he's just in it for the crack." In Irish *craic* means "fun" or "kicks." But the filthy pun was obviously intended. My face hardened and I balled up my fists. Liam didn't look concerned.

"Hush, you!" Mary said. Then, turning to me, "And I'll thank you to control yourself as well. This is serious business. Liam, I'll vouch for the man. Give him the package."

Liam's hands appeared at last. They held something the size of a biscuit tin. It was wrapped in white paper and tied up with string. He slid it across the bar.

"What's this?"

"It's a device," Liam said. "Properly deployed, it can implode the entire administrative complex at Shannon Starport without harming a single civilian."

My flesh ran cold.

"So you want me to plant this in the 'port, do yez?" I said. For the first time in weeks, I became aware of the falseness of my accent. Impulsively, I pulled the neuropendant from beneath my shirt, dropped it on the floor, and stepped on it. Whatever I said here, I would say it as myself. "You want me to go in there and fucking blow myself up?"

"No, of course not," Mary said. "We have a soldier in place for that. But he—"

"Or she," Liam amended.

"—or she isn't in a position to smuggle this in. Human employees aren't allowed to bring in so much as a pencil. That's how little the Outsiders think of us. You, however, can. Just take the device through their machines—it's rigged to read as a box of cigars—in your carry-on. Once you're inside, somebody will come up to you and ask if you remembered to bring something for granny. Hand it over."

"That's all," Liam said.

"You'll be halfway to Jupiter before anything happens."

They both looked at me steadily. "Forget it," I said. "I'm not killing any innocent people for you."

"Not people. Aliens."

"They're still innocent."

"They wouldn't be here if they hadn't seized the planet. So they're not innocent."

"You're a nation of fucking werewolves!" I cried. Thinking that would put an end to the conversation.

But Mary wasn't fazed. "That we are," she agreed. "Day by day, we present our harmless, domestic selves to the world, until one night the beast comes out to feed. But at least we're not sheep, bleating complacently in the face of the butcher's knife. Which are you, my heart's beloved? A sheep? Or could there be a wolf lurking deep within?"

"He can't do the job," Liam said. "He's as weak as watered milk."

"Shut it. You have no idea what you're talking about." Mary fixed me with those amazing eyes of hers, as green as the living heart of Ireland, and I was helpless before them. "It's not weakness that makes you hesitate," she said, "but a foolish and misinformed conscience. I've thought about this far longer than you have, my treasure. I've thought about it all my life. It's a holy and noble thing that I'm asking of you."

"I—"

"Night after night, you've sworn you'd do anything for me—not with words, I'll grant you, but with looks, with murmurs, with your soul. Did you think I could not hear the words you dared not say aloud? Now I'm calling you on all those unspoken promises. Do this one thing—if not for the sake of your planet, then for me."

All the time we'd been talking, the men sitting at their little tables hadn't made a noise. Nor had any of them turned to face us. They simply sat hunched in place—not drinking, not smoking, not speaking. Just listening. It came to me then how large they were, and how still. How alert. It came to me then that if I turned Mary down, I'd not leave this room alive.

So, really, I had no choice.

"I'll do it," I said. "And God damn you for asking me to."

Mary went to hug me and I pushed her roughly away. "No! I'm doing this thing for you, and that puts us quits. I never want to see you or think of you again."

For a long, still moment, Mary studied me calmly. I was lying, for I'd never wanted her so much as I did in that instant. I could see that she knew I was lying, too. If she'd let the least sign of that knowledge show, I believe I would have hit her. But she did not. "Very well," she said. "So long as you keep your word."

She turned and left and I knew I would never see her again.

Liam walked me to the door. "Be careful with the package outside in the rain," he said, handing me an umbrella. "It won't work if you let it get damp."

I was standing in Shannon Starport, when Homeworld Security closed in on me. Two burly men in ITSA uniforms appeared to my either side and their alien superior said, "Would you please come with us, sir." It was not a question.

Oh, Mary, I thought sadly. You have a traitor in your organization. Other than me, I meant. "Can I bring my bag?"

"We'll see to that, sir."

I was taken to their interrogation room.

Five hours later I got onto the lighter. They couldn't hold me because there wasn't anything illegal in my possession. I'd soaked the package Liam gave me in the hotel room sink overnight and then gotten up early and booted it down a storm drain when no one was looking. It was a quick trip to orbit where there waited a ship larger than a skyscraper and rarer than almost anything you could name, for it wouldn't return to this planet for centuries. I floated on board knowing that for me there'd be no turning back. Earth would be a story I told my children, and a pack of sentimental lies they would tell theirs.

My homeworld shrank behind me and disappeared. I looked out the great black glass walls into a universe thronged with stars and galaxies and had no idea where I was or where I thought I was going. It seemed to me then that we were each and every one of us ships without a harbor, sailors lost on land.

I used to say that only Ireland and my family could make me cry. I cried when my mother died and I cried when Dad had his heart attack the very next year. My baby sister failed to survive the same birth that killed my mother, so some of my tears were for her as well. Then my brother Bill was hit by a drunk driver and I cried and that was the end of my family. Now there's only Ireland.

But that's enough. ○

## MOVING?

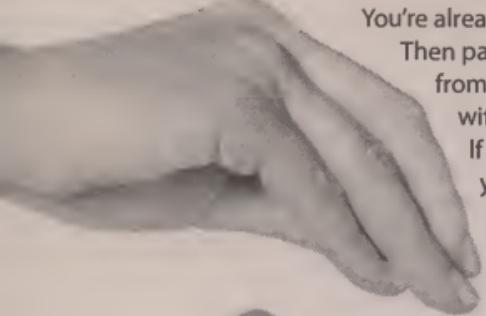
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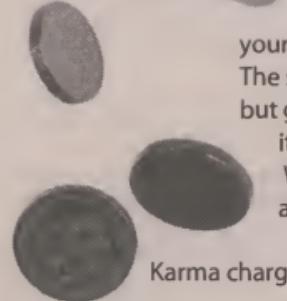
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# Bribing Karma

Karma can be bribed—and openly,  
though coin of the realm is experience.  
What will you offer in trade?  
The ambitiously young may give up true love  
for the fast fortune—

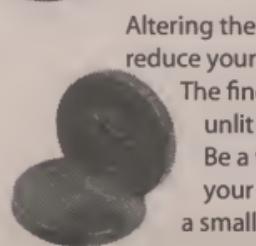


You're already settled into the career marriage?  
Then pay a thousand smiling gazes  
from your firstborn child  
with its arms upraised in hope.  
If you still see such looks after the bargain  
you are being played false.



Maybe you ask for a smaller gift  
at a smaller price  
but small is relative—  
your meaningless trinket is another's lifetime.  
The stranger's glance you missed was small,  
but given to the right person  
it made decades of difference.  
When you bribe karma you request  
another's treasure.

Karma charges accordingly.



Altering the deal will not always  
reduce your compounding interest.

The fine print is written across  
unlit clouds between the stars.  
Be a wise investor in this market—  
your next payment due may be  
a small grace.

—Danny Adams

# WE WERE WONDER SCOUTS

Will Ludwigsen

Will Ludwigsen often wishes that he could have been a Wonder Scout instead of just the ordinary kind, but judging by his recent works in *Alfred Hitchcock's Mystery Magazine*, *Strange Horizons*, *Weird Tales*, and the *Interfictions 2* anthology, maybe he is one after all. Will recently received an MFA from the University of Southern Maine's Stonecoast program, where he studied partly under the tutelage of Asimov's regular (and Wonder Scoutmaster) James Patrick Kelly.

Yes, I was there: a Wonder Scout, one of nine, at our first campout led by Charles Hoy Fort himself in the summer of 1928. Back then, we didn't have handbooks and uniforms like you do now, no recorders or cameras. All we had was our need to see more than everybody else, to uncover the realness behind things. During that trip to the Adirondacks, we saw something real, all right, something terrible and even wondrous. It's probably saved me from a life of . . . whatever it is that most people lead.

I was thirteen then, the son of Norwegian immigrants living in Queens, and I needed saving. I've come to respect my father and my mother in the years since, just like you will, but back then they seemed so needlessly grim and unimaginative . . . just like yours do. Father had earned his way to America with fifteen years of wet freezing misery on the sea, and he never let anyone forget it, least of all me.

"Your mother waited for me, Harald, you know that?" he'd say. "I worked those ships for fifteen years, but she knew I'd come back. She knew I'd come for her. But I had to earn it first, and you have to earn it, too."

"Earning it" meant going to school at I.S. 25 every day, paying attention, doing my homework, and coming home to my father's newspaper stand in the afternoons to sell *The New Yorker* and Pall Malls to men taking trains home from Manhattan. I wasn't allowed to read the science fiction magazines because then we couldn't sell them. Or so he said.

My parents, Father especially, had little interest in the imagination. "Why would you read things that someone else made up?" he always wanted to know. We had no books of fiction in the house or a radio, and I didn't have many toys.

What I had was Thuria, and it was better. In the shadowy crawlspace beneath my house where only I could fit, I built a kingdom out of discarded sardine tins, thread spools, and cereal boxes. A wide boulevard wound between four hills to a colander

capitol dome. There, King Wemnon and his twenty wise councilors benevolently discussed and executed their national affairs. Sometimes they called the men to arms to repel giant invading animals, usually the neighbor's cats. Often, they built elaborate fortifications along the frontier to defend against the evil Count Pappen and his massing armies. At least once, they sent lone heroes across the dusty wasteland to rescue poor Princess Annabella from the Tower of Eternal Woe.

A strange sensation of stretched time would overtake me when I visited Thuria, started by a sort of whispering trance, and I could perform whole epochs of its development in just a few stolen moments before dinner. Have you ever felt that way? It's a feeling of total absorption, the kind that seems to hum and fizz against the edges of your brain.

But all great civilizations have their end, and Thuria was destined to be no different. One evening after work, my father saw my shoes poking out from underneath the house and he pulled.

"We didn't come all the way to America just for you to imagine somewhere else," he said after he looked inside. He got the broom and, with the same caprice as the sea washing over Atlantis, he swept Thuria into history.

"The only life you need is yours," he told me, with the tone of someone doing me a favor.

Now, I've lived a long time since, and I can tell you that it wasn't a favor. I've never felt the absence of a person as much as I felt the absence of Thuria. I fell sick for almost a week after its destruction, shivering beneath a blanket in my room despite my mother's care. When I returned to school, to the bullies who chased me through the hallways and yelled "hurm-hurm-hurm" to make fun of my accent, I hunched at my desk all day staring at math problems and maps of dull places. When I returned from school, my feet fell hard onto the sidewalk like I wore shoes of iron. My dinners were bland, my baths were cold, and everything seemed as yellowed as an old picture.

I might have grown into a different man that way, the kind who skulks and flinches his whole life, who talks at parties about what roads he drove to get there, but then I found Mr. Fort's poster at the library on Fifth Avenue and everything changed.

As far as my father knew, I spent my afternoons studying English, and that wasn't entirely wrong: all the books about castles and ghosts and heroes I read in the library were certainly written in English, and I studied them closely. I'm surprised that I even noticed Fort's sign at all, and I sometimes doubt it was only luck.

"BOYS! DO NOT BE CATTLE!" it seemed to shout. The handwriting shrank smaller and smaller the further I read. "What do you see from the corner of your eye? There are secrets all around us, and the vibrations of the universe are not perceivable by common senses. Do you want to see the ropes and wheels behind the façade? Then come to the next meeting of the WONDER SCOUTS!"

I'd heard of the Boy Scouts and even met a few. Maybe they're different these days, but in my school at least, they were either swaggering bullies who wanted to join the Army as soon as they could or sickly goody-goodies who organized every project like they were building the Pyramids. I'd always wanted to go camping, but it didn't seem worth it if idiots like that would be there, too.

But Wonder Scouting . . . well, that had the sound of something different. I did a lot of wondering. What was going on in Loch Ness? Were ghosts really the spirits of the dead? Was there ever really a minotaur? How did Stonehenge get there? Were there really mummy curses? Could someone still find Excalibur? If anybody was a born Wonder Scout, it was me.

Well, me and Mr. Fort. When I met him at the first meeting, he wasn't anything like any adult I'd ever met. Though mustachioed and barrel-chested like a taller Teddy Roosevelt, he was more a scholarly sort than a man taken with physical adven-

ture. He wrote books about the strange things nobody noticed, spending hours reading and collating articles in newspapers from all over the world. He kept boxes and boxes of notes about snakes dropping out of the sky, airships shining lights on European cities, giants walking the ocean floor, comets exploding, the seas running red. He talked all the time like a boy in a clubhouse about what really made the world work.

"Reality leaks," he told us at the first meeting. "The consciousness that imagines us into existence doesn't always remember all the details. It gets distracted. It lets things slip. It can't keep up the illusion in all places and all times, and it's our job to find those places and times, to peel back the edges."

There were eight other boys at that meeting (we didn't have girls in the Wonder Scouts until the sixties), and I remember them all to this day. There were Hiram and Caleb from the Bronx, twins who lived just a few doors down from Mr. Fort's house; they spoke at last year's Jamboree. There was Clarence, the boy whose father ran a bank downtown and gave him a ten dollar bill every week; he wore a suit to the park. Dudley built ghost detectors from cans and wire, nothing like the fancy EMF ones you have today. Stevie smelled like trash, and we never asked why. Petey came all covered in bruises and was the quietest boy I'd ever met, except when you asked him about alligators; he and I are still friends, long after our wives have passed on. Patrick's father worked the docks and wanted his son to learn the trade. Tony's parents came from Italy, and they didn't understand the importance of fishmen and spaceships like all of you do.

With Mr. Fort's advice and urging, we looked together for those peeling edges of reality. We weren't very organized about it—there were no formal badges for ghost hunting or cryptozoology yet, even if we'd had uniforms on which to sew them—so we just kind of kept our eyes open while we went to school or did our chores. We peered into sewer grates for tiny people. We listened at tavern doorways for the whisper of alien languages. We broke into haunted houses and rapped on all the walls, climbed over junk piles searching for misplaced Roman artifacts, spit into Mason jars to measure the proportions of our humors, and hypnotized each other with pocket watches to plumb our evolutionary memories. Just like the things you've been doing all week here at Camp Manticore.

We lived, as best we could with parents and schoolteachers nagging us to do dull things like chores and homework, by the tenets of the Wonder Scout oath. Will you say it with me?

On my honor, I will do my best  
To confound the expectations of society,  
To observe the super-consciousness in all its workings,  
To seek independence in body, in intellect, and in spirit.

We followed the Wonder Scout Law, too, which we recited at every meeting.

A Wonder Scout is curious, adventurous, strong, observant, resourceful, brave, skeptical, thoughtful, and aware.

We only had nine back then, but you've added "careful" these days. That's fine; lawyers need work too. Mr. Fort wasn't exactly what you'd call careful, and neither were we. You didn't have to be in 1928, or so we thought until that camping trip to the Adirondacks that made me a Wonder Scout forever.

See, Mr. Fort had discovered in his research that several people had disappeared near Moreau Lake over the years from 1925 to 1928, and he figured we'd be the perfect team to investigate. We'd had some practice now with research and investiga-

tions, and there wasn't a boy among us who wouldn't notice a man's socks didn't match if we saw him across Times Square.

To one of our biweekly meetings in the library basement, Mr. Fort brought a map of the terrain for our briefing.

"That's it, boys," he told us. "See where those lines converge? Those are vertices of superluminal power, the harp strings of the Earth, pluckable only by the sensitive and the damned. When they come together like that . . . well, it's no wonder that people seem to disappear to common eyes."

"Are we going to disappear?" asked Petey. He's always been a little cautious, even today.

Mr. Fort wouldn't let him worry. "At worst, we'll be absorbed into the super-consciousness, learning and seeing all knowledge at once in a single stupendous flash. More likely, we'll find a tunnel to an underground civilization of pygmies or a portal through time."

"Or a sinkhole," Petey suggested.

Mr. Fort narrowed his eyes at that, I remember. "Well, if you want to buy what They tell you, sure. A 'sinkhole.'"

Luckily, Mr. Fort didn't bring all that up when he asked our parents for permission. It took some convincing for my father to let me go, and I'll admit I was vague on the exact name of the organization; we were boys and we were scouts, and that was all he needed to know. As far as Father thought, I was learning to tie knots and chop trees, growing big and strong and American. I didn't mention that Mr. Fort was as likely to fly to the Moon as tie a knot. More likely, even.

We traveled four hours to the mountains in a borrowed school bus, and Mr. Fort spent most of it lecturing from the front seat, listing the missing people from memory. Mine's not as good after all this time, but I'll try my best. The dates are probably wrong, but they're close.

"August 12, 1925: Pauline Walters, lost while gathering blueberries. November 3, 1926: Emily Lindbergh, no relation to the aviator, lost while playing tag with her brother. April 16, 1927: Penny O'Hare, a girl witnesses saw walk over the top of a hill and then never return, vanished in thin air; the authorities searched for her with bloodhounds. June 27, 1927: Susan Franco, escaping in the night from her drunken father, never found. March 9, 1928: Mary Williams, one of her saddle shoes left behind near the roots of an oak tree."

Something struck me. "They're all girls," I said.

"Excellent observation, Harald," said Mr. Fort. He wasn't watching the road that well. Like I said, we weren't careful yet. "Do you think feminine sensitivity makes them more amenable to seeing through time and space? Or are hearty human women simply appealing to the ancient races?" He waved his hand. "Dryads and so forth?"

I didn't have an answer for that, so I shrugged.

"We'll just have to find out for ourselves, then," he said. "There's no substitute for direct research."

"What if they're dead?" asked Petey. Of course he'd think of that—he became a doctor fifteen years later.

Mr. Fort shook his head. "Where are the bodies? Where are the footprints? Where is the panicked confession of a killer? No, these girls just walked into another world."

"I don't want to walk into another world," said Petey, but only I heard him.

"Sure you do," I whispered to him. "We'll all be with you. Me, anyway." That seemed to make him feel better. Lost isn't quite lost when you're with someone else.

We arrived at Moreau Lake late on Friday afternoon, descending through a notch in the mountains to approach its narrow rocky shores. The place was beautiful then and for all I know, it's beautiful now. I haven't been back. I'm guessing they've civi-

lized it, built up ice cream shops and hotels, made it safe and not at all mysterious. When we went, there were a handful of small cabins built around the lake, a few private houses, some rugged trails, and miles of wilderness. That's it. We had to carry our own tents, our own canned food, our own jugs of water.

You wouldn't think it to look at him in those thick glasses and tweed suit from the back of the handbook, but Mr. Fort was a decent outdoorsman. We pitched our tents on high ground, faced them toward the rising sun, tied our food bags into the trees to keep them from bears, and built our fire circle out of rocks so it wouldn't spread. By sundown, we'd cooked ourselves a hearty if messy meal of beans and franks out of an iron skillet, and we sat together on logs to eat it.

Most of us had never been camping, certainly not out in the woods like that, and there is something grand and adventuresome about eating under the darkening skies, isn't there? Food just seems to mean more. That moment, sitting there with Mr. Fort and the other boys listening to the surging songs of the crickets, was probably the first real magic of my life outside the city of Thuria. And it was with real people. My people. Just like you.

Soon after dark, Mr. Fort added fresh logs to the fire and handed out nine forked sticks, one to each of us.

"Tomorrow morning, lads, we'll be looking for the true magnetic terrain of the area, following the likely paths taken by the missing girls toward the gate or portal. I've found that dowsing rods are excellent ley line detectors, and we'll each carve our own tonight."

He showed us how to strip the twigs of bark—"for greater sensitivity," he said—and whittle the handles for perfect symmetry with our hands.

"It's a delicate instrument, a dowsing rod. Not something you clutch with your fists like a shovel. You hold it gently, letting it do all the work. Maybe the Earth makes it move and maybe you do, but either way, nothing happens if you think too hard on it."

Each of us set to quietly preparing our dowsing rods while Mr. Fort leaned back on his hands and propped his feet close to the fire.

"Oh," moaned Caleb. "I broke mine."

"No, you didn't," said Mr. Fort. "Yours is just meant to be short."

After a lifetime in the city, my first night in the woods was more than a little eerie. In our neighborhood in Flushing, you could hear people talking at all hours, dogs barking, things rattling among the trash cans. Here, I heard only the great engine of the forest, rumbling at idle, waiting for us to fall asleep before roaring forward.

"Do you know any ghost stories, Mr. Fort?" asked Tony. He liked to tell us the ones his grandmother told from the old country, all about gypsies and potions and vengeful friars.

Mr. Fort turned and looked at him. "Ghost stories, my boy? They're just the gossip of the dead. What kind of damned fool wastes his heightened awareness of all time and space to come back and tell you that he loves you? Or where the family treasure is buried? Or who killed him? They all say the same things, those ghosts, none of it interesting. None of it sublime." He snorted. "The whole world is a ghost, echoing and fading from the perfect original. We are the ghosts."

That wasn't what I'd expected him to say at all. I never imagined that Mr. Fort was all that picky about the weird experiences he collected in all those shoebox clippings.

"Well," I said, "what's the scariest story you know?"

Mr. Fort squinted in my direction. "Oh, a good old-fashioned campfire yarn is what you want, is it? I'm not sure I've got one of those, but the scariest tale I've ever heard goes like this."

Everybody leaned closer to the fire, even Mr. Fort.

He cleared his throat. "Not long ago in one of civilization's greater cities, two young friends walked together at night in an old quarter of leaning brick buildings long

abandoned. They conversed about their usual subjects, the unusual and the lost, and they hardly noticed as the brownstones beside them grew more and more dissolute and decayed, so absorbed were they in talk of faraway places. It wasn't until they turned a corner and saw the crumbled fieldstone house that they paused."

A pine cone in the fire popped and sparks splashed into the air.

"It had been there far longer than the others, maybe even to Colonial days. They stood looking at it, fascinated. One of them stood watching, fascinated by its architecture, curious about its history. The other? After just a few moments, he recoiled in horror and ran shrieking down an alley."

All us boys traded glances.

"The man gave chase to his friend, shouting for him to stop, to wait. But the friend ran for blocks and blocks before finally stumbling to a halt. He put his hands on his knees and gulped the air.

"What happened?" asked the other man. "What did you see?"

"She was waving to me," cried the friend. "From the windows! A woman in grey, smiling. She beckoned from behind the glass. She wanted me to come inside, and I... I had a terrifying idea that she'd never let me out again."

I'm not sure about the others, but I shuddered. The gust of breeze from out of the woods didn't help.

"The other man shook his head. 'But my friend,' said he. 'There is no glass. There are no floors from which to wave. The building is a ruin.'"

By then, everyone had stopped whittling their dowsing rods.

"But I saw it complete," said the friend, "As it was in the old days. I saw a fire within. She wanted me to stay with her, I'm sure of it. The left side of her face was beautiful."

Mr. Fort prodded a log in the fire with his boot.

"The other man wanted to go back to try to see it again," he finally said, "but his friend was clearly shaken so they walked home together in silence."

Nobody said anything for a long moment. Then Tony asked, "Wait. That's it?"

Mr. Fort didn't look up from the fire. "For the rest of his life, that other man would wonder about that night. Most of all," he said, even more quietly and almost to himself, "he'd wonder why nobody ever beckoned to *him*." He shook his head. "That is a horror story, lads."

All the other boys groaned and swatted their hands at him, but Mr. Fort's story gave me a strange chill. For all our searching and listening and reading, I had yet to see something extraordinary myself. I wondered if I ever would, but I didn't have to wonder long.

The next morning, after our breakfast of runny eggs and cold sausage, we prepared for our first excursion. We filled our canteens, unfolded Mr. Fort's maps, and marched into the woods with our dowsing rods.

We fanned out amid the brush, Mr. Fort at our center yelling directions. "Come around the tree! No, this way! Stop!" he'd shout. "To the left!" I couldn't tell if he had some intended direction for us or if he was just improvising. I was too busy tumbling headlong over rotten logs and getting entangled in the vines to notice. Clarence broke his dowsing rod in a fall. Caleb kept stopping to drink.

The day wore on, hot and muggy, and gnats buzzed around my eyes. By lunchtime, I was sweaty and tired of the whole exercise. I didn't know much about seeing magic, but I knew you didn't see it with a bunch of guys yelling in the woods. You didn't see it when you had to go to the bathroom or had mosquito bites all over your arms, either. Am I right?

So when we gathered in a circle of elms to eat our cheese sandwiches, I took the opportunity to drift away from the group and eat mine alone.

"Where are you going?" asked Petey.

"I've got to pee," I said, not quite telling the whole truth. What could I say to him? He'd kept me up half the night in our tent, talking about his vicious old man, and I'd talked to him as best I could. Now I was full of everyone, including him, at least for awhile.

"Oh," he said. "I'll just be here." He sat on a boulder a few feet off from the other boys.

If I'd been a better person, I might have stayed. I just couldn't, though. I turned and climbed over a ridge out of sight, and then I walked deep enough into the brush toward the protective drone of insects.

I did my business behind an oak, and I stopped to sit upon a log to eat my sandwich before going back. It gave a little beneath my weight, obviously hollow. I'm not sure why, but I stooped at one end to look inside.

The log was half-filled with a silt of rotten leaves and loam, and holes in the bark let in beams of yellowed sunshine. Among those beams, along a wide promenade of rich black soil, I saw the perfect place for a new city of Thuria, protected from my father, ready to rise again from destruction. Maybe I could never come back to see it, but at least I could always know that it was out here, growing on its own, living on no matter what happened to me. It would take no time at all, I figured, to set up some pine cone buildings and a leafy pavilion. So I reached inside and traced streets with my finger. I built a capitol out of bark. I tipped water from my canteen in the center of town, a fountain celebrating the fallen kings of ages past.

And then I heard the crunching leaves of human footsteps behind me.

Turning quickly expecting to see Petey or Mr. Fort, I saw instead a man in brown dungarees and a white shirt watching me from the edge of the hemlocks. He seemed to be silently flexing his mouth, his eyes wide. His hair had strands of grass in it, as though whippoorwills had nested there. He was tall and skinny, his legs most of all, and he swayed on his feet.

"You find 'em?" he said, finally.

"Find who?" I asked.

"The little people."

I squinted into the log, and it seemed to stretch for miles. At the blurry edges of my vision, I could imagine the daily errands of a tiny civilization, but I knew that they were only imaginings. When I turned back, the man stood closer, though I hadn't heard him approach.

"I don't see anybody," I said.

The man nodded. "You want to?"

When I stood up, it seemed to take longer than usual and my head felt as airy as that log at the end. I swayed in the clearing like one of the saplings, barely strong enough to resist the breeze. I had a feeling something wasn't right, but I couldn't quite decide what it was.

"I think I might have to go back," I said, though my words felt as fuzzy as cotton.

The man held out his hand but I didn't take it. He grunted and stumbled into the trees, weaving from trunk to trunk, ducking beneath the lower branches. I followed a few yards behind, listening for any sign of Mr. Fort and the other Scouts. I heard none.

We came to an igloo of branches thickly woven together. The man pulled aside a sheet of old green canvas and pointed inside.

"Go in if you want," he said.

The woods had gotten quiet, if that's the word for it. No, they'd gotten *slow*, as though the birds still opened their beaks to sing and the leaves still blew in the wind but they did it at a speed you couldn't quite perceive.

I bent down to look inside. There, lying upon a bed of moss, was a girl in a white dress, not much older than me. She was asleep, one arm cast above her head and the other crossing her chest. Her feet were bare, and her fingers long and pale with strange purple-blue nails. Her blonde hair had been sprinkled with flowers.

"She's my princess," he said, close to my ear. His breath was cold. "Annabella. I rescued her."

I blinked and turned to him. "Annabella? From Thuria?"

He raised his finger to his lips and reached for me with his other hand, wide and fleshy, the fingernails packed deeply with grime.

Time surged forward like a nickelodeon. I screamed and spun out of his reach. His mouth narrowed to speak and he lunged for me, but I was too fast. Jumping, crashing, shrieking through the bushes, I swam my way back to the others, not sure if he was following or not.

I all but fell out of the forest, covered in scratches. "I know where they go!" I cried, scrambling on all fours. "I know where they go!" Everyone came over to help me stand but I was swinging my arms in all directions.

Mr. Fort looked over my shoulder, back toward the way I'd come. Then he sprinted into the forest himself, and the rest of us followed. You wouldn't expect a middle-aged man to leave a group of thirteen-year-olds behind, but I think now that Mr. Fort wanted it more than we did, whatever he was chasing, whatever I'd seen. He could have scuttled atop those brambles if he had to.

When he trotted to a stop in the middle of a clearing, we caught up to him. He was staring at the ground, eyes wide, and we followed his gaze to the object of his horror.

It was an old green canvas tarp, bigger than the one that had formed the door of the hut. It was streaked with patches of brown blood, and the toe of a saddle shoe poked out from beneath.

There was no log. There was no Thuria. There was no igloo. There was no man.

We stood there, all ten of us, staring at the tarp a long time. Mr. Fort could probably have stayed there forever. We had to push our hands against him to get him to leave.

The guys helped Mr. Fort and me back to camp, and neither of us was particularly useful for packing up the tents and knapsacks. Petey and Caleb had to slide Mr. Fort into the driver's seat of the bus. After he sat for a few minutes blinking through the windshield, he leaned forward slowly to start the engine. It took us six hours to get home after we called the New York State Police, and I looked so sick when my father saw me that he sent me straight to bed.

That was the first night of many since that I've wondered just what I saw in those woods or how I saw it. The police found the other bodies, of course, though no one ever figured out who killed those girls or why they'd all been buried in white gowns. In all the questions I answered for detectives, I tried my best to describe the man who somehow entered or exited my Thuria, but I could never quite fit it all into words. I've found that the harder you work to explain something, the further it slips away. Maybe that's why Mr. Fort's books are all but unreadable.

After that, our meetings were never quite the same. Mr. Fort hadn't expected something so . . . expected out in those woods, and I think he was too spooked to take us on any other camping trips. Not that that stopped us, of course: most of us found other ways to get out again under the stars. Of course I did, sometimes alone, sometimes with Petey, sometimes with a few of the other guys—always to see just another glimpse of Thuria.

Of course I wanted to see it again. Wouldn't you? I've been a Wonder Scout for my whole long life, even when it's cost me, and I always will be. There's no changing that for people like us, a little blessed and a little damned.

I know some of you are waiting and hoping like I did for your moment of magic. I can't promise you'll have one, though looking at you here around the fire, I can see in your eyes that you've got a sporting chance. But you should know that there are no roads into Thuria, only out, and not all the people who take them are good.

It will come, Scouts. You can't be ready, but you can be brave. ○

# *The Music of Nessie*

is indistinct and  
somewhere in  
the far distance,  
with long moments  
of silence between  
every string of notes.

As each brief interlude  
of elusive sound expires,  
you are astounded  
by the liquid  
and serpentine grace  
of its movement.

Yet it remains vague  
and far in the distance,  
like the memory  
of a dream  
on awakening.

Like the times  
the telephone  
rings and you hear  
it ring a moment  
before it rings.

You can never be sure  
whether you have  
heard anything or not.

—Bruce Boston



# PAIRS

Zachary Jernigan

**Zachary Jernigan lives in Portland, Maine with his girlfriend, her daughter, and a cat with an eating disorder. "The sale of "Pairs," my first to *Asimov's*, made me jump higher than I've ever jumped in my life. The inspiration for the character Louca was a lyric from the Frank Black song, 'In The Time of My Ruin.' The rest of the story just came from somewhere else."**

I had been practicing turning myself into a knife. Between star systems I gathered and focused my particles into a triangle, a sharp shape. Hurling myself against the diamond-hard walls of my small ship, the point of the weapon hardened. I honed myself.

You see, I had decided to murder my employer. I had studied his weaknesses and come to believe myself capable of the act. I did not know when and where, nor did I know what would trigger it. I simply knew it had to happen. On that day I would either die or buy myself a measure of freedom.

Originally, this was the extent of my plan: To serve myself.

My name is Arihant. I am one of two humans still inhabiting a physical form, diminished though it is. Outside the walls of my ship, I am in form a faintly translucent white specter, strong and powerfully built—an artist's anatomical model. Over the years it has become difficult to remember what my face looked like, and thus my features are only approximately human, my head bare. My eyes glow the color of Earth's sun.

I am quite beautiful, Louca tells me. On more than one occasion she has run her hands over the ghostly contours of my body. "I wish you were solid," she once said. "Oh, Ari. The *things* I would do to you."

Louca is the one I am forced to follow and observe. Her name means "crazy"—an appropriate name. She is the second human possessing a body. Technically, her body is a black, whale-shaped ship one hundred meters long, but her avatars take the forms of anything she imagines. Very rarely, she is human, and never the same person twice. More often, she wears the bodies of flying animals.

She dreams of flying, which is appropriate.

Our profession is transport. For three centuries we have hauled the disembodied souls of Earth—each stored in a projection cube—from star to star to be sold. They are quite expensive, I am told, but I have no understanding of the means of exchange. Nearly everything is hidden from me, and Louca sees nothing.

The reason souls are bought varies. Often they are kept as curios. Sometimes they are used to attract customers to the buyer's business. My employer used to goad me on these points: "Is it not wonderful to know your people are put to such good use? Imagine how happy it must make them!"

But I know the truth. Even without physical bodies, men become lonely. They despair and I feel it. Surely Louca feels it; she goes crazier and crazier in such close proximity to ghosts. Before the events of this recording, only the luckiest souls were bought in pairs or groups, a rare occurrence. Now, because of Louca and I, it is the rule that souls must be sold in pairs.

It is my one accomplishment, making men marginally less alone.

Still, I arrange nothing—I have no power over the situation. I follow Louca from a distance of one hundred thousand kilometers, never any closer, and report anything unusual. I need not watch very closely. Louca's duty is to dream violent dreams, to defend and deliver her payload. Hopefully, her capacity for violence will never be tested. She is categorically insane—a fact that, my employer insists, makes her uniquely suited to the job of protector.

Employer. Job. The terms are ridiculous, for Louca and I are not paid. Our terms of service are not negotiable. I am no one's employee, but I prefer not to use the word slave. Or master.

I cling to life. I value it, though what value it has is measured in a mere handful of molecules. I possess no unique or useful knowledge, only memories. My ship, small though it is, has several lifetimes' worth of entertainment files. I immerse myself in virtual environments so flawlessly rendered I forget they are fiction. I have lived many lives, largely uninterrupted by my duties.

An observer might call these lives empty, but between systems, often decades at a time, they are all I have.

By my count, the year is 2432—though I may well be wrong, as we travel faster than the speed of light. Not that it matters; Earth is dead, ground up for fuel, all her souls absconded with. In the time it has taken me to lose track of my own lives—a hundred, a thousand years—the fate of mankind has not changed.

I record these words for a posterity that will not exist.

I was interrupted in the middle of making love to a four armed, furred woman. My life of four years dissolved around me, and I woke in my single room to find a message written on the surface of my desk: *We have arrived in the Sfari system.* A quick check in my journal confirmed that we had visited it once before, nearly two centuries previously. A second visit is rare.

Before/Under me spun Sfari, a blue-green marble. To my right, in the process of docking with a triple tori-shaped station, was Louca. She opened a bay door for me and I guided my ship inside. Several robota, eight-limbed and silvered, ignored me as they passed by in the maintenance corridor. Their carapaces nearly brushed the ceiling. An inspection team from the satellite, I recalled from last time.

I found Louca in the debarking lounge. She had taken on the form of a five foot-tall flying squirrel, cartoonishly feminine—one of her favorites. A paw tapped the handle of the cart loaded with souls, eyes staring out the lounge's one window. There was nothing to see but the pitted wall of the station.

"How are you, Louca?" I asked.

She turned and smiled, revealing large incisors. "Arihant! You wouldn't imagine where I've been!"

"I bet I can." We have this conversation every time we meet.

"No, no. I was a *hawk*." She curled one claw, beckoning me closer as if to share a secret, and whispered, "I just flew in. I'm a hawk right now, actually, but you can't really tell. A *vicious hawk*."

"You are?"

"Yes. I am." She rocked back, looked me up and down. "You look *wonderful*. Where have you been?"

I considered my life, just erased. I had been an author of erotica on Luna, a famous man. I had had twelve children from seven women, a penthouse apartment in Saftron Towers, and an endless supply of drugs. It had been wonderful—wonderful but already fading, disappearing faster and faster the more I tried to cling to it.

"Nowhere special," I told her.

Her rodent face managed to look sad. "That's sad," she said.

The door irised open, admitting us into the station.

The cart guides us to the buyer. A cube intended for him/her/it glows and Louca hands it over. That is all, generally. Sometimes I am asked to demonstrate how to activate the soul projection, and I pantomime pushing the cube's single button. I have been instructed that Louca is not to perform this action—perhaps because, unlike me, she could physically depress the button. I have been warned several times not to allow this to happen.

Apparently, the customers too are warned to never activate the projection before us. This used to disappoint me. I used to long to see the person trapped within the device, but now I know it is for the best. If I see another human, I have to explain what I am and what I do.

The schedule is the same every time. We deliver the souls and store the cart. If sales are negotiated in the interim, we return to the ship to retrieve more cubes. Thus, during the night—or whatever constitutes the end of the business day—Louca and I are allowed to wander. I do not follow her; I do not witness what trouble she causes. For me, carnal pleasures are had only in simulated life.

Our first day in orbit above Sfari we delivered seventeen souls to representatives of—to my untrained eye—nine species. The final three transactions occurred at the central market, a raucous, jumbled warren of stalls displaying items recognizable and foreign. The various species eyed us with expressions I read as menacing, hungry, disinterested—never friendly.

One smiled, or possibly grimaced, exposing blue and yellow gums. He gestured to me and tried to hand Louca a sheaf of gold leaf bills in exchange. *“Fuck you,”* she said. *“I’m a hawk and you’d better back off. I wouldn’t sell Ari for all the gum in a candy store.”*

We locked the cart to a metal stanchion. There I said goodbye to Louca.

“Goodbye, Louca.”

“Wait, Ari. What are you going to do tonight?”

“I do not know. Maybe I will get a drink.”

She did not laugh or crack a smile at my joke. *“Oh. Okay, Ari. I’m going to eat a rabbit. Bye!”* She lifted her arms, let out a piercing cry, and bolted down an alley between stalls.

I traveled the triple tori, a trip of six hours—approximately thirty kilometers. Each contained a different atmosphere, but this presented little challenge to me; I can pretend to swim as easily as pretend to walk. The satellite’s population was by turns elegantly menacing, sleekly torsional, gelatinously disgusting. Four of the species I recognized from sales earlier in the day. Free of containment suits, they were no prettier.

It happened while I was watching diners from under a restaurant awning in the main torus. The establishment catered to what I thought of as Sfari’s native species, the one most represented in the satellite: a crow-billed, green bipedal people. I recognized one from a delivery earlier. He/She/It and several others stood on long, thin legs around a high circular table.

On its top a projected woman danced.

A human soul, the first I had ever seen.

I stared at her naked body, unable to look away. She was beautiful, muscular thighs and arms bangled in silver and gold. She made me ache in a way unrelated to physiology. I have no organs, no bones, yet I swear I felt the sparse molecules of my being shudder collectively.

I had seen real women, ages ago, another lifetime ago. I have made love to many more in virtual life, but this was something else—the essence of a woman, the essence of her dancing, not hips gyrating but the idea of hips, and breasts, the idea and memory of real sex . . .

Suddenly, she looked up, stared at me as though she had felt my eyes on her.

My reaction was swift—almost as if I had been planning to run, had known it was going to happen—as if my ghost muscles held the memory of flight. I condensed myself into a tight ball and rocketed away, but not before I saw the fear in her eyes. More than likely, she would be taken somewhere to be displayed, never to see another of her kind.

Somehow, she knew.

We left, and I immersed myself in the best sort of lives, full of danger and sex, but they went sour. I flitted from one to the next, unable to find comfort.

I was followed.

On Crete in the fourth century BC, a young girl with golden eyes stood always on the periphery of public markets, watching me. When I walked toward her, she turned and fled, disappearing into the crowd.

On Barsoom, the ghost of a garroted princess floated under the surface of my villa lake, only seen from the corners of my eyes. The long strands of her purple hair became weeds that drifted under the hull, just out of reach.

In my dressing room at the Ole Opry in 1937, I kept finding items I had not left: a hairbrush, a compact, a crushed package of women's cigarettes. When I went on stage, my knees shook and sweat stained my underarms. Every woman I brought to my dressing room said the same thing: "Not tonight. I don't feel right tonight."

As Odysseus, I was haunted by visions of Penelope being ravaged by a crow-headed god. I woke in the night clutching my furs, hands and forearms cramped. My grip became weaker and weaker until I could no longer hold a weapon.

I could not forget the image of the woman, dancing—her eyes meeting mine.

I spent more and more time out of simulation, watching old movies and reading novels I have read many times. From time to time I watched Louca in the view screen, her twin lava-red exhausts lashing like tails from side to side, warping space in ways incomprehensible to me. I meditated. Oddly, the discontent focused me. I felt a control over my form I had never known. I changed form faster. My edge became sharper, my point harder.

I became a better knife.

"You're different this time, Ari," Louca told me after we finished the deliveries. "I'm going to stay with you tonight."

Ten years we had traveled to reach Jejuno, a hazy, city-covered planet. Due to its triple suns, the world never became dark, just a greater shade of grey. We delivered seventy-three souls without incident the first day. The people of Jejuno, bipedal oxygen-breathers—to my eyes the unfortunate mating of toads and civets—stared at Louca and me in open curiosity, but never opened their mouths to speak.

She wore the body of a redhead boy. It was a coincidence that he resembled the woman I had seen above Sfari. Surely it was. Nonetheless, her appearance unnerved me.

"I am no different, Louca. Enjoy your evening."

But she insisted on coming with me. She talked nonstop as we walked at the bottom of a canyon of skyscrapers, along maze-like alleys winding through tent cities at the buildings' feet. Nowhere was there a road wide enough for a vehicle. Above us, however, powerful aircraft boomed, snapping the canvas tent walls and blowing trash at our feet.

She sneered. "It *smells*, Ari. Smells bad." She draped a piece of purple cloth over her forearm. "Do you like this color on me, Ari?" She made me stop to watch a puppet show at the intersection of two alleys. We were watched as much as the show. "These people, Ari. They're *weird*." She stepped in a pile of dung or rotted trash. "Shit, Ari! What is this, *shit*?"

At the largest intersection we had yet seen, she licked her index finger and held it in the air. "Right, Ari—definitely *right*."

The avenue opened up. In a few kilometers it had become a major thoroughfare of six lanes, along which segmented commuter buses puffed grey smoke from multiple rooftop exhausts. Motorcycles, two and three wheeled, weaved around the larger vehicles, wasp-engines piercingly loud.

A median separated the two lanes, widened into a park of high deciduous trees. We crossed a bridge over the road and onto a path leading inward. Instead of becoming darker, the sky grew lighter. The shadows of the trees stretched behind us, fanning out to each side and, shortly, we entered a clearing where an artificial sun shone above the tree line. Children, the first we had seen, climbed on a series of large, colorful cages.

"We should sit, Ari. Talk." Louca sat cross-legged and patted the matted green vegetation.

I sat. I did not look into her eyes. I remembered the near-sexual reaction I had had to the dancing woman's soul. Discussing it with Louca—especially as she was, in a body that resembled the woman—was impossible.

"Louca, there is nothing to talk about. Everything is fine."

"I know you're lying." She closed her eyes, stretched her arms as if they were wings. "How do I know? A hawk knows these things. We can see deep into the hearts of everyone, see fear and pain and desire. All of it. And *you*, Ari." Her right eye popped open, fixed on me. "You're radiating guilt. A lot of guilt."

"What do I have to feel guilty about, Louca?"

She closed her eye again. She reached her hands out as if they were claws, grasping, and plucked an invisible thing from the air. "Ha! I've got it!" She cupped whatever it was in her hands, held it up to her ear, and shook it. Grinned. "It's something to do with a woman, Ari." Both eyes popped open and met mine. The grin disappeared. "You hurt someone. *Oh, Ari*, you hurt a woman."

For a moment it felt as if I had a heart—as if something inside me had misfired. But Louca could not have known about the woman, and I calmed as I thought it through. Maybe I had hurt her. There are a thousand small and unpredictable ways to offend an unbalanced mind.

"I am sorry if I hurt your feelings, Louca. Whatever I have done, I apologize."

She laughed and closed her eyes again. "Ari, Ari, Ari. You're an idiot, but I still love you."

I waited, but she would not speak again. Clearly, I was correct: I had done something to offend her. After several minutes of waiting, it also became clear that she wanted to be alone, and so I stood up to go. Louca could find her way to the shuttle; she always did.

When I looked back from the treeline, she sat in the same position, listening to the secret in her hands.

My employer's name was Slaf'Salakem. I thought of it as a he, but I am not sure this is correct. In appearance, he was a two and one half-meter high blue-green reptile, proportions roughly those of a man. His smooth-scaled body shone iridescently. When he smiled, blood red gums retracted from long black dagger teeth, and all four sinewy limbs ended in sickle-shaped claws.

His replacement, whom I also think of as male, is only broadly similar—reptilian surely, but large muscled and slow, peg-toothed. Still, I think they are the same species. I would rather picture one annihilating race than several.

I write this and it sounds ridiculous, as if I still have hope.

And if my description of them seems comical, somewhat cartoonish, then I have failed to describe them properly. Beyond their general appearance, I know almost

nothing about the race that destroyed Earth. Overall, I found that I was not curious—that I did not want to know. How could a man cope with the loss of an entire planet, everything he has ever known?

Knowing our destroyers will not make the tragedy easier to handle.

After freeing me from the prison of my projection cube, Slaf'Salakem had told me what his people had done, what I was, and what I was to do.

In perfect English, he told me, "Your chief value is predictability, Arihant. You will do as you are told. Never forget that you are my pet."

He introduced me to Louca—in suspended animation, wearing the body I assume she had lived in on Earth—and seemed to speak with a touch of affection. "She is crazy. She tried to bite me, can you believe? Of course, I will remove that memory. But the craziness—I will not remove the craziness. I would have her no other way." He ran a clawed hand over her face. "She needs to be quick and strong. We have cargo others envy."

He glanced at me. "Report anything unusual—anything—to me. Initially, you will travel known, generally safe routes. You will become used to routine, and what constitutes a problem. I want to know if she becomes unstable. Tell me you understand."

"I understand," I said.

There were so many questions I did not ask. Once, I had a family. I might have attempted to free them. I did not even try. Then, I was simply grateful to be free.

My only questions were, "Why have us do this? Why not one of your own people?"

My new employer had shown me the first of his rare smiles. "My people are too self-centered; good conquerors and bad nurturers. Other species we have tried on occasion, but the situation is much the same. No one wants to lose decades traveling the void. Though we paid well, we could not guarantee delivery. Too many factors in deep space. Sometimes violence is called for. Through eons of trial and error, we have found that no one protects the souls of the dead better than their own people."

We delivered seven souls the next day. Louca was quiet and spoke nothing of our interaction the previous evening. I was happy to let it rest. I had thought about my conduct and was unable to fathom what I had done to offend her. It embarrasses me to admit, but I also considered briefly the possibility that Louca had in fact read my mind and seen the dancing woman.

Before we stepped into the shuttle—nearly home without incident—she reached out to grab my arm.

"Ari," she said, and frowned as her hand passed through my shoulder. It had been a while since she had tried to touch me. "Ari," she repeated, eyes wide, moving her hand back and forth in my chest. "Why, you're a ghost!"

She was forgetful. I looked down at her arm, cut off at the wrist. "You are right, Louca." I turned to enter the shuttle, but she closed her fist inside me—and I felt yet another new sensation, almost like being unable to breathe. I found that I could not move forward, so I turned back to her.

"No, Ari," she said. "You're a ghost *right now*, but you don't always have to be a ghost. Nobody *has* to be a ghost. A ghost is a person with no reason to live. A hawk with clipped wings. Oh! You know what I think? I think you need to fill in your body, grow some flight feathers."

Her eyes widened. She grinned. "No. Even better, Ari. You need to find the man who clipped your wings. Clip his wings *right* back."

Eight years of dissatisfying lives—focused only through the lens of my knife meditation and the reoccurring vision of the dancing woman—passed before we touched down again.

Eight years, so easily glossed over, yet to do so is a denial of the truth, which is that the enjoyment I once took in simulated living had soured completely. Outside the simulation, I became increasingly aware of my own body. I itched—or remembered itching so vividly it seemed that I itched—and I felt hunger.

Eight years, so easily glossed over.

The planet Gratte was covered by a shallow aquamarine ocean spotted with innumerable brown islands. Louca met me in the shuttle bay, wearing the body of an Egyptian goddess, statuesque and sun-brown, hawk-headed, seven and a half feet tall.

She waved fingertips in my chest and said, "You're still you, Ari. A ghost." Her hooked beak did not move when she spoke. I wondered if her breath smelled of meat, of rotted fish.

"And you are still you, Louca," I answered. "A raptor."

One great amber eye winked.

We descended in a jacket of flame, in silence. Hammo, a walled city of dried brown clay bricks, was uninteresting, as were its people, walking on eight legs, clacking their claws and mouthparts unceasingly. The sound was maddening. After twelve deliveries—three of which oddly were pairs—the particles of my body felt jumbled. I doubted my control over them, as if my form were wavering in the hot sun.

Louca disappeared silently just after the final delivery, off to her pleasures. I climbed the wall of the city and dropped to the beach below. The clacking of claws and mouthparts died away, and I began to relax.

Lines of electric white writhed on smooth rocks below crystalline water. The sea extended to the horizon before me, broken only by humped bodies of islands too numerous to count. Close to shore, small fish and invertebrates flitted from rock to rock. A school of paddle-finned insects the size of sea turtles swam slowly just below the surface several meters out, feeding on something I could not see.

As I watched, a dark shape detached itself from a distant rock and arrowed through the water toward me. The school of insects parted, but not quickly enough. Without slowing, the dark shape's arms darted, impaling one, two, three. Yellow gore trailed in its wake.

I waited.

He rose from the water. His body glistened. Small black eyes, set deep in an angular skull, regarded me for a moment and looked away, uninterested. He held one fist closed, slender tendrils of yellow ichor dripping from it.

"Hello, Slaf'Salakem," I said.

I was not surprised to see him; I half suspected he would be there. I had become used to meeting him on water planets. Slaf'Salakem enjoyed one thing above all else: Hunting. It was the only personal information he shared with me. During our meetings, he made displays of skill and talked of killing. I had once confessed to him my own love for hunting, though his proclivities were vastly different from mine. He never bagged his kill. Many times I witnessed him moving on without pausing to examine what he had killed.

The first time I witnessed this behavior was also the first time I remember wanting to kill Slaf'Salakem. I began trying to become a knife soon after.

"Three pairs today, Arihant," Slaf'Salakem said. "That should please you."

It took me a moment to understand that he was referring to the deliveries. "Why would that please me?" I asked.

He shrugged. "They are your people." He flicked a piece of viscera from his arm. "It is better for them not to be alone, no? Your people are very communal, if I remember correctly. Very poor survival strategy in the long run."

This was the other type of conversation I had with Slaf'Salakem. I believe he wanted to incite a reaction from me. This had always seemed the underlying purpose of our

meetings—to anger me, belittle my people. Of course, now I know the truth: He was trying to keep my spirit under his heel, so that I would never consider betrayal.

"It is?" I asked.

"It is. And complicating for business. I find myself wondering if selling a pair of human souls is better for our long-term plans than selling just one. Pain is often more compelling than joy, in my experience—and usually more salable."

His eyes met mine and flicked away again. "Then again, it is possible that this is the wrong tack, as well. Perhaps I should simply raise the price of pairs, market them like one does a breeding pair. What do you think, Arihant?"

I looked away. "How was your hunt?"

He sighed. "Too easy." He raised the closed fist to his face and opened it. A translucent blue globe sat within. It went into his mouth whole—a flash of blood red gums and ebony teeth. "Mm. Easy, but quite delicious. There is no way to tell the difference between male and female separr, and there are far fewer females than males. One must kill a dozen or so animals before finding an ovary."

I did not kill Slaf'Salakem that day, though I wanted to, but the anger had not focused me into a weapon. While he talked of killing, a wave of nausea I could not explain passed through me. With no stomach, no organs to speak of, nausea is surely impossible. Yet I felt it, the urge to vomit. I feared that if I did my body would fly apart and I would be unable to piece myself together again.

To keep from doing so, I fantasized about smothering Slaf'Salakem in a cloud, asphyxiating him. Thankfully, before I lost control completely, he grew bored with our interaction and dived back into the water, taking my nausea with him. Powerful strokes soon took him out of sight.

I thought then that my plan was foolishness. I could not kill Slaf'Salakem. I had been a fool to think I could, had overestimated my courage and control.

I turned my back on the sea. On the wall of the city above me stood Louca.

I held up a hand in greeting, but she did not respond. Her eyes were fixed on the horizon. Curious, I waited for a reaction, some hint at her purpose.

None was forthcoming. After several minutes—both of us standing motionless—she turned and jumped down, out of sight. I eventually followed, intent on explaining my interaction with Slaf'Salakem. As far as I knew, she was not aware of his existence, and I worried what conclusion she might have drawn from our meeting.

That night, I walked the streets of Hammo, looking for her. The alleyways and avenues were quiet, utterly deserted. I circled the city by walking on the enclosing wall, but saw no sign of Louca. Near morning, however, as the horizon began to glow and the citizens started clacking their claws, I thought I heard one of her piercing cries, far out to sea.

A guilty conscience, surely. My job is to watch Louca for signs of instability, and I had been lax. Her madness had always run along predictable paths, but if this changed she would be in danger. Slaf'Salakem would not hesitate to replace her.

When Louca and I met at the shuttle the following morning, I said nothing, hoping she would tell me what it was she had seen, or what it was she had hoped to see staring out at the ocean. She did not. The feathers on her head were dark and stiff, stuck together in spikes. I suffered a moment of doubt and wondered—if I could pluck one of her feathers and taste it, would it taste like the sea?

We walked in silence along Louca's corridors. Before stepping into my ship, she finally spoke:

"For a second yesterday, I thought you were hunting." She angled her head down and turned so that I stared directly into one dark eye. "For a second, I thought you were a hawk, too. I guess I was wrong. I'm disappointed in you, Ari. No, don't say anything—it's okay, I forgive you because you're not as strong as me."

She started to reach forward, but stopped centimeters from my chest. "I . . . Oh, Ari. I forget what you are sometimes. But don't fret. I'm going to do something for you. Do you *want* me to do something for you, Ari?"

Before I could answer, she turned and left.

I wonder: What would I have said if she had not walked away?

Tava. Smoltwar. Klin-Klin. Abas. Berun. I remember the names, but not much of the places or people. Louca was twice forced to fashion modified bodies to handle the atmosphere. Once, she inhabited the body of a great clanking robot, and refused to speak. She beeped and flashed lights at me. Fortunately, we need not communicate to do our job, though I wonder if she interpreted my lack of comprehension as rudeness.

On one planet we saw nothing but the inside of a bare room. For the first time, the customer came to us, and we were not allowed our shore leave. Louca, wearing the body of an immense bat, scratched gouges in the metal walls in her rage. I worried that it might become a regular thing. Maybe we would never see the surface of another planet. I knew I could do nothing for Louca in that event. Fortunately, it seemed to be an isolated occurrence.

My relationship with Louca returned to normal. We never talked of Gratte or Jejuno.

The space between stars was silent, as always. I had a lot of time to think, lives to squander. I stopped meditating. Gradually, the dancing woman left me alone. She disappeared and for a time I convinced myself that I had forgiven myself.

Gradually, I gave up my plan for revenge.

This is not true—not entirely. I would not tell this story, otherwise. Slaf'Salakem is, after all, dead, but I am not the one most responsible. Louca has a passion for death I did not then comprehend. She is also more watchful than I knew, though I doubt she understands what she sees. She is all reaction, no forethought or reflection.

The oceans of Xhef were nothing like the shallow, friendly sea of Gratte. Deeper and colder than Earth's waters, Xhef's oceans had given birth to an astounding variety of marine life.

After our deliveries in the port city of Erois were completed and Louca disappeared, I watched the fishing boats unload at the docks. For several hours, the massive, six-limbed sailors of Xhef pulled no two of the same creature from their cargo holds. Toothy fish and finned reptiles of all sizes and shapes.

I was not surprised when a small boat arrived bearing a messenger. Silent, the sailor presented a slip of paper to me. On it was written, *Go with him. He will take you to me.*

I watched black seabirds fly as we hugged the jagged shoreline. The sky was overcast but bright, the kind of fluorescent white it hurts the eyes to stare into. Spires of dark gray rock, jagged and bare, rose like teeth to eat the landscape behind us. The trip to the small bay lasted less than an hour, but we lost sight of the city within minutes.

In the center of the bay was a hole. Glimpsed now and then as grey waves rose and fell, the sailor gave it a wide berth. It looked very much like a whirlpool, but did not seem to affect the currents. The hole had to be artificial. Suddenly, waves of nausea passed through me—just as they had the last time I'd met Slaf'Salakem.

The sailor pointed to the dark hole, and rumbled alien words.

I needed no translation. I dispersed into a cloud and floated off the deck.

Forty feet deep and ten wide, the walls of the well were black, smooth as glass. Slaf'Salakem stood on dry sand at the bottom, waiting for me. He wore an unusual garment on his torso, a harness or armored vest with two smooth silver compartments positioned over chest and upper back. His eyes followed me down. I imagine he wanted to show that he could see me, though I had not formed my body yet.

"Hello, Slaf'Salakem," I said, organizing my particles.

He looked away, now dismissive. "Arihant. What do you think of my aquarium? Outside this temporary wall swim over five thousand species of carnivore, some no bigger than my palm and some well over fifty feet in length."

"Are you hunting?" I asked.

He smiled an open, honest smile. He only displayed this expression when the hunting was particularly good. "Yes, I am hunting today, Arihant. Do you want to see the creature I am hunting? Good. Watch."

Torchlight bloomed in the bay. Beyond the wall Slaf'Salakem had erected, mobile lights were moving, illuminating three long, sinuous shapes. I stared, gradually forming a picture of the creature Slaf'Salakem was to hunt. Measuring fifteen to twenty feet, it was shaped somewhat like an eel though fatter, flattened horizontally rather than vertically. Its wide mouth could not close due to the length of its teeth. It had no eyes, though I doubted it suffered much for their lack. Though it moved slowly, I knew it could move quickly if the situation demanded it.

It was one of the most beautiful creatures I had ever seen.

The lights went out.

"They are quite intelligent," Slaf'Salakem said. "I have observed them for days. These three females control this bay, protecting their eggs from other creatures and males of their own species with an enviably violent and cunning zeal. Alas, unprotected I am no match for even one individual creature, nor for many of her cousin species. I must protect myself with this wall, though I keep it very close to my body while hunting."

"You have no weapon," I observed.

He smiled again, clearly enjoying the subject. "In addition to protecting me, I can form atom-thin knives and spears from the force-field substance. Still, it is a challenging hunt. They do not die easily." He stretched, grimacing. "And the generator packs restrict my movement. What one does for sport, eh, Arihant?"

I said nothing. I remember thinking how often Slaf'Salakem mirrored my anxieties, how often he seemed to read my soul. A knife or a spear.

"You will watch," Slaf'Salakem said, "after I remind you of the terms of your employment. Louca has been watching me, as I am sure you are aware. I only became aware after our last meeting. She followed me, Arihant—she swam after me, *chased* me—and I want to know why. Beyond this, I want to know if she can be relied upon to do her job. If not, I will find someone else; perhaps I will even consider replacing you. It will not be easy to train your replacements, but I will not hesitate."

The nausea increased. I began to feel shaky, disparate, on the verge of shuddering apart. An image of Slaf'Salakem standing over the dancing woman's broken body flashed in my mind. I observed it as I would the real thing—from a distance, unable to move.

I knew then that if I did not act I would fail her.

"I do not know," I said. The particles of my being halted, as if waiting for me to direct them. "I know nothing about this."

Slaf'Salakem stared at me for a long moment before turning away. The irrational fear that he knew my thoughts returned. "Should I believe you?" he asked. He exhaled quickly, loudly. I realized that he was laughing.

He continued. "I think I should. I trust you, Arihant. I trust you because you know your chief value. You know that I will see any change in you. You have neither the personality or cunning to betray me. You are a reliable old dog. Louca, on the other hand—I have decided that she will be replaced. She is becoming a liability, and . . ."

I stopped listening. I now see that it is immaterial, whether or not Slaf'Salakem had been able to read my mind. It does not matter if he understood that I was gathering the courage to kill him. He had made a judgment: I was harmless.

Every molecule of my being hummed with hate. I had finally decided that death was preferable to continued slavery. No, I thought nothing of my people, the thousands of souls I had helped sell into another form of slavery. I felt hate, pure and clean. I felt free.

I condensed myself into a knife, a sharp shape, and aimed for Slaf'Salakem's throat.

I hesitated. A second. Two seconds.

In that moment, the sky above went dark, and something entered the well. Something huge fell, screaming, wings folded to its side yet still brushing the wall. A shrill scream filled the bottom of the well, compressing my body tighter with its pressure.

Slaf'Salakem looked up and I darted forward, burying myself in the soft tissue of his throat just before Louca slammed into the ground, crushing his body beneath her.

She died, of course, along with Slaf'Salakem. If the fall was not enough to kill her, the water caving in probably was. If that also did not kill her, the creatures of the bay surely did.

Thus, Louca does not remember killing Slaf'Salakem. Her body was never recovered and her memories died on the planet Xhef. Louca-the-hawk never uploaded to Louca-the-ship. Whatever urge that had compelled her to kill our employer died with her.

Or it did not. Sometimes I think she is waiting for an opportunity, still. Sometimes I catch her looking at me while we walk behind the cart on our errand. When she is in the body of a human, I almost read the look as wistful—possibly even loving. During these moments I remember my mother, my wife, my children, and I feel warmth suffuse my body, and I think about the type of being I have become. I wonder. I wonder and maybe I remember what it feels like to be a true man. Altogether, it is not a bad thing to feel.

But I cannot return Louca's look. She is a crazy person. She needs me and in my way I need her, but it is best not to read too deeply into our relationship. It is best not to dream of being closer to her—of finding a way to travel inside her instead of so far behind. We would undoubtedly grow tired of one another, being cooped up together for such long periods.

My employer's replacement, Slaf'Samas, arrived three weeks after Slaf'Salakem's death. He recovered the generator packs from the bay, but no body was found. I stuck to my story. Slaf'Salakem and I had talked for a time, and then he had dismissed me.

"He died while hunting, then?" Slaf'Samas rumbled in a thick voice I struggled to understand. "He was hunting something dangerous?"

I described to him the animals that Slaf'Salakem had shown me.

"Then he was also being hunted?" Slaf'Samas asked. He wondered if this was a fair assumption.

"I think it is a fair assumption," I answered.

It is perhaps that simple, the deception of my new employer. It is my understanding that he came into Slaf'Salakem's position unprepared and uninformed. Certainly, he knew nothing of his predecessor's plan to restrict the sale of human souls to pairs.

And so, I dutifully informed him of the conversation Slaf'Salakem and I had before his death. With my help, Slaf'Samas grew to understand the economic benefits. He is, if anything, more unpredictable than my former employer—quicker to anger, quicker to threats. His loathsomeness, however, is manageable. He does not hunt, nor does he draw me into conversation. He is not stupid, but he is not a sophisticated mind, either.

It is possible that I can deceive him again, win more concessions, but I do not suffer any delusions. Whatever my contribution, it will be small. Men are still slaves. Louca and I are no more than couriers.

I record these words for a posterity that will not exist. O

# NEXT ISSUE

## SEPTEMBER ISSUE

Espionage and skulduggery are afoot in our September issue. At "The Observation Post," a new novelette by the always popular and multiple Hugo-Award-winning author **Allen M. Steele**, dangerous secrets of the Cuban Missile Crisis are unwittingly uncovered. The disruptive consequences of these secrets will continue to play out in our own precarious era. Additional perils can be found in distinguished author **Alan Walls**'s novelette about British and American agents who must race against time to determine who's "Burning Bibles."

## ALSO IN SEPTEMBER

Intrigue can also be found in new writer **Erick Melton**'s novelette about a plot to control a new form of space travel that is only available to those who can hear the "Shadow Angel." Terror must be confronted if a resourceful victim is to survive **Robert Reed**'s "Stalker," while **Neal Barrett Jr.**'s dastardly "D.O.C.S." wreak havoc on a boy and his family. When dealing with a devastating plague on a distant planet, **R. Neube** shows us that those who live to tell the tale will be the ones who listen to what "Grandma Says" and **Carol Emshwiller** follows two homeless old women who set out on a poignant mission to find "Danilo."

## OUR EXCITING FEATURES

**Robert Silverberg**'s "Reflections" column shines some light on "The Reign of the Retired Emperor"; **Paul Di Filippo** contributes "On Books"; plus we'll have an array of poetry and other features you're sure to enjoy. Look for our September issue on sale at newsstands on July 26, 2011. Or you can subscribe to *Asimov's*—in paper format or in downloadable varieties—by visiting us online at [www.asimovs.com](http://www.asimovs.com). We're also available individually or by subscription on *Amazon.com*'s Kindle, *Barnes and Noble.com*'s Nook, and *ebookstore.sony.com*'s eReader!

## COMING SOON

new stories by **Nancy Kress**, **Eleanor Arnason**, **Ken Liu**, **Kit Reed**, **Kij Johnson**, **David Ira Cleary**, **Kristine Kathryn Rusch**, **Eugene Mirabelli**, **Pamela Sargent**, **Jack Skillingstead**, **Carol Emshwiller**, **R. Neube**, **C.W. Johnson**, **Bruce McAllister** & **Barry Malzberg**, and many others!

# PARADISE IS A WALLED GARDEN

Lisa Goldstein

**Lisa Goldstein manages to cram Elizabethan spies, Arab scholars, and a Japanese homunculus into an alternate history tale of engineering and derring-do. Lisa's latest book, *The Uncertain Places*, is just out from Tachyon Publications.**

**T**he copper arrow on the dial swung into the red, and Tip grabbed a bucket and ran to the water pump. She filled her bucket, hurried back to the homunculi in danger of overheating, and poured the water down the hole in their bench. Steam shot out of the hole and she jumped back. When the air had cooled enough, she bent to read the dial, watching as the arrow wavered and then settled at a lower temperature.

She stood and looked around the vast manufactory. Homunculi sat at their work tables, stamping out hot iron with their hands and then pushing the newly formed metal off into the baskets below. Their copper and brass torsos were fused to the benches beneath them, and hoses snaked down from the benches into the basement. Troughs moved above them along overhead tracks and poured the metal into molds on the tables, and other scrap boys scurried around the room, carrying off baskets, checking valves and gauges, pumping water, darting out of the way of escaping steam.

One of the homunculi had filled its basket with iron parts. Tip took the basket and set a new one in its place, then carried the heavy filled basket off to the side of the manufactory. The beat of the homunculi as they worked in concert sounded from every part of the room; she could even feel it pounding through the floor.

She stopped suddenly. Now that was odd. One of the homunculi had made a move that was slightly off, a beat before or after its fellows. She hurried toward it and bent to look at the dial on its bench.

What she saw made her turn cold suddenly, even in the heat of the manufactory. The arrow was swinging back and forth across the dial, from the low numbers to high ones and back again, something she had never seen before.

She looked back up at the bench. The homunculus she had noticed earlier was reaching up for one of the troughs overhead.

She gripped the hose going to the basement and pulled as hard as she could, but it was clamped too tight for her to move it. She tugged again. "Help me!" she called out.

"You there!" a muffled voice said. She looked around. It was the foreman, up in his office overlooking the manufactory floor, calling down on his speaking tube. "What are you doing? Get away from that hose!"

The hose came free finally and the homunculus stopped, its arms still lifted over its head. She looked around frantically. Other homunculi were reaching for troughs now and pulling them down, then rearing back to fling molten iron across the floor. One of them threw a trough at a scrap boy; it hit him in the stomach and spilled hot metal down his legs, and he screamed in pain.

She couldn't possibly pull out all the copper hoses in time. The other scrap boys were running for the door, and she hurried after them.

Outside they all milled around nervously. Tip looked through the door and saw the foreman still talking through the speaking tube; she hoped he was calling the men in the basement, telling them to shut down the engines.

Slowly, very slowly, the homunculi came to a halt. They sat frozen, one with its arm raised over its head, another holding a trough awkwardly with hands that had been made for stamping metal. As Tip watched the trough slipped from its hands and landed with a crash on the floor.

A few of the scrap boys ventured back into the manufactory, picked up the wounded boy, and carried him outside. He looked very pale; Tip thought he had fainted. Others boys called their farewells and left for home.

She thought about heading home too, about a day without having to work, but she needed the money. Maybe Lawton, the foreman, would have something for them to do. And there was another reason she decided to stay: she wanted to know what had happened. She had never seen the homunculi rebel against their tasks like that.

Men began coming up from the basement, their clothes and hands and faces covered with the coal they had been shoveling into the engines. Then, a long time later, the foreman left his office and reappeared on the manufactory floor.

He hurried through the rows of stilled homunculi. One of them seemed to stare at him, its brass eyes open wide. "You there," the foreman said, seeing Tip at the door. "How did you know what was going to happen?"

Too late she realized she had broken her first rule: never let anyone in authority notice you. She turned and ran. The foreman hurried after her, cursing.

"What did you do?" he called. "Did you have anything to do with—with what happened back there?"

She rushed on ahead, dodging people, dogs, a horse pulling a cart. Another homunculus, heading toward a job somewhere, came slowly toward her, its arms and legs clanking. She scurried around it, then jumped over a sewer running down the middle of the street.

She could not stop, could not let the foreman catch her. Girls were not allowed to work at the manufactory, and she had had to disguise herself to get a job there.

She was breathing hard, though. Her legs were far shorter than the foreman's, and her breasts were starting to chafe against the band she used to flatten them.

She turned and saw the foreman put on a burst of speed. He reached out and grabbed her by the ear. "Why did you run?" he asked. "What have you been up to?"

"Nothing. Ow."

"Nothing? Innocent boys don't run. What were you doing with that hose?"

"You saw. They was moving. I was trying to stop them, that's all."

"They hadn't started moving yet, not when you were pulling on that hose. How did you know? Did you have something to do with?"—he gestured back toward the manufactory—"with all of that, back there?"

"No, 'course not."

"Why were you running, then?"

"I thought you was angry with me."

"Well, you were right about that. You're coming with me—we're going to the Watch."

The foreman turned and headed back. Tip tried to pull away one last time, but it was mostly for form's sake; she knew she couldn't outrun him.

All of the scrap boys were gone by the time they reached the manufactory. "What happened to that boy?" she asked.

"What boy?" Lawton said.

"The one that was burnt. Did they take him away?"

Lawton shrugged. A man streaked with coal dust came out of the manufactory and headed toward them, one of the basement workers.

"A call came through the speaking tube while you were gone, Master Lawton," the man said. "From Whitehall."

"A—a call?" Lawton said.

"From Whitehall."

"Whitehall? Do you mean Queen Elizabeth?"

"One of her clerks, somebody like that. She wants to see you." His voice lowered, and he said reverently, "She's sending a steam-car."

Lawton muttered something under his breath. It sounded like a curse, and Tip remembered other times when the foreman had grumbled at something the queen had done. She wondered why he disliked her.

"You," Lawton said to Tip. "Don't you go anywhere. I need you to explain all of this to the queen."

Tip felt a sudden joy. She had never known anyone who had been inside a steam-car, let alone traveled in one. She knew better than to let Lawton see her happiness, though. He was yet another adult with power over her, someone who could change her life with just a few words.

The steam-car came toward them, wobbling on its four wheels like a newborn calf. A man wearing goggles sat high up at the front; as they watched he pulled on a lever and the car jerked to a halt. The man jumped down and opened a door.

Lawton pushed Tip into the car and followed her inside, and they sat together on a bench of soft dark-red velvet. Two gas-lamps lit the interior, one on either side, their bases fashioned into flowers. Tip reached up to finger the controls. "Don't touch that," Lawton said, and she dropped her hand quickly.

The driver closed the door and the car clattered off down the street. The foreman turned away to look out of the window. Tip had never spent so much time with him before, and she saw now that he was older than she had thought, maybe even forty. His eyes and hair were dark, and his face was narrow and set in a scowl, as though he was being forced to miss something important.

She glanced beyond him, to her reflection in the window. She looked much younger than her real age of fourteen, she knew, with a wide face, brown eyes, and brown hair she had cut clumsily with a knife.

The car clanged down into a pothole, and they could hear the engine grinding, working the car up out of the hole. Finally it pulled free and they continued on.

She knelt on the bench and looked at the streets passing beyond her window. It was still morning; the homunculi had rebelled almost immediately after they had started work that day. People were walking to work or to schoolrooms, and beggars had taken up at their places and were calling out to passersby, more of them every day as the homunculi took their jobs. Dark steam poured from a row of chimneys in the distance.

They came to the warren of streets where she lived, and people turned to stare as they drove by. She nearly grinned to think that her landlady might see her riding high in a steam-car. Agnes might not recognize her, though. Every day as she walked to work Tip would hide in an alleyway to change her clothes and bind her breasts, and when she left the alley, transformed into a boy, her walk would change, and her way of speaking. Even her thoughts seemed different.

She tried not to remember that time, three years ago, when her parents had died, when Agnes, who had once seemed so kind, had threatened to evict her if she couldn't pay her rent. Tip had spent weeks applying at manufactories in London, but she heard the same story from every foreman she talked to: the manufactories were dangerous, they were no place for a young girl. Finally she had hit on the idea of disguising herself as a boy, and had been hired at the first place she tried.

The engines had fascinated her from the beginning. When a man had arrived from Al-Andulus to install some new homunculi she had attached herself to him like a shadow, much to his displeasure. Still, she had managed to learn the Arabs' numbers from him, so different from the numbers she was used to, and so much easier to use.

She had not been able to learn much else, though. Every device that came from Al-Andulus had been welded shut, and whenever someone at the manufactory tried to open one the works inside were nearly destroyed.

The car turned, shook loudly as if it was about to come apart, then drove on another few yards and stopped. The door opened. "We're here, sir," the driver said to Lawton.

The walls of the palace loomed up above them, five or six stories tall. The driver led them to one of the doors and ushered them inside, then handed them over to a man dressed in livery.

They followed the man down a hallway with chessboard marble floors and a high vaulted ceiling, past long halls hung with portraits and tapestries, through rooms with stained-glass windows and elaborate wooden roof-beams, curved and re-curved, so delicate they seemed barely able to hold up the ceiling. Wheels and chandeliers of gas-lamps shone down from the ceilings.

Tip looked around her, entranced. Lawton, though, kept his expression closed, either unimpressed with what he saw or trying to seem so.

Finally they came to a room with a closed door. A homunculus stood on either side, holding a raised crescent sword. The man in livery spoke a password, and the homunculi lowered their swords and flung the door open.

"Her Gracious Majesty Elizabeth, by the Grace of God Queen of England and Ireland," one of the homunculi said in a loud flat voice.

They went inside. Queen Elizabeth sat at the head of a long table, her hands resting on the arms of a high carved chair. She wore a raised starched collar, and a black skirt and bodice with puffed sleeves, heavy with gold buttons and great square rubies and emeralds. Rows of black pearls hung from her neck. Two more homunculi with swords stood at her side; they looked fiercer than the ones at the manufactory, their mouths sneering, nostrils flaring, heavy eyebrows lowered in a frown.

A group of men sat around the table. Lawton bowed to the queen, and Tip imitated him quickly. "Well," Elizabeth said. "You're Henry Lawton, or so the man I talked to told me. But who's this urchin with you? And what's been happening at my manufactory?"

Elizabeth looked at Tip, and she saw that the queen was terribly old, ancient beyond almost anyone Tip knew. Her face was heavily powdered, with thick drifts of powder in her lines and wrinkles. Her hair was a bright unnatural red, and her teeth were nearly black with decay.

Lawton cleared his throat. "The homunculi—they stopped working all at once. They pulled down the troughs and threw hot metal across the room . . . And this boy here, he seemed to know it would happen, even before it started—"

Elizabeth turned to her. "What's your name, child?" she asked.

"Tip."

"And Master Lawton here says you knew the homunculi were about to rebel. How did you know? Did you have anything to do with it?"

"No! No, I would never do nothing like that. One of them monkeys—a homuncu-

lus, I mean—it moved in a funny way, quicker than the others, so I looked at the dials. They was—well, usually the dials stay around fifty or sixty, and when they get up to eighty or ninety, that's when we pour in the water, to cool them. But these dials was—”

“Wait a minute,” Lawton said. “What do you mean, fifty or sixty? Those dials don’t have numbers. When the dial points to the red, that’s when you’re supposed to pour in the water.”

“They do, though. Someone showed me once. Not our numbers, the numbers on clocks and things, Roman numbers he said they was. They have their own—”

“He’s talking about Arabic numerals,” someone at the table said.

“That’s right, the Arabs’ numbers. Well, the numbers was jumping all over the place, fifty, then ninety, then fifty or sixty again. So I watched them monkeys carefully, and that’s when one of them reached up—”

“Do you have any idea why they would have done that?” Elizabeth asked.

“No,” Tip said.

“It’s those Arab wizards, my lady,” an old man at the table said. “We should never have let the infidels sell us those devices.”

“Nonsense,” Elizabeth said. “To begin with, they’re not wizards—they’re natural philosophers. And we need natural philosophy too, if we’re to keep England strong.”

“How is what they do different from sorcery? Lifeless men who walk and talk—how are they not demons?”

“Because I say they’re not, Burghley,” Elizabeth said. “Because I’ve told you countless times—”

“Because we know how they work,” Tip said, interrupting her. Lawton flinched as if he thought the queen would become angry, but Elizabeth said nothing. Tip spoke faster, anxious to make them understand. “And they work the same way, every time. We know that if you heat water you get steam, and that you can use the steam to turn wheels, or move pistons, or—or anything you want.”

“But they’re not working the same way now, are they?” the man at the table—Burghley—said. “You say you know how they work—well, why are they rebelling?”

“I—I don’t know,” Tip said. “It could be—well, someone could have *made* them rebel, done something to them wheels and cogs and things to change them.”

“There, you see,” Burghley said. “It’s the Saracens, just as I said. Who else would know enough to tamper with the homunculi? They did something to them, and now they don’t want to work, is that it?”

“It ain’t that they don’t want to.” Tip’s words fell over each other as she hurried to explain. “They can’t *want* anything. They’re made to do what we tell them.”

“That’s right,” Elizabeth said. “They don’t have free will.”

What did that mean, free will? No one stopped to explain it to her, though. “But they seem to have free will now, or something like it,” someone at the table said, a young man with a hunch to his back.

“Never mind all of that,” Burghley said. “The question is, can we fix them?”

“Somebody can, I bet,” Tip said. “Not me, though. I don’t know enough.”

“The ambassador from Al-Andulus should know,” Burghley said. “What was his name?”

“Bashir ibn Tariq al-Qurtubi,” Elizabeth said. She turned to one of the homunculi standing at her side. “Go fetch the ambassador from Al-Andulus.”

The homunculus left the room, its feet clanging loudly against the marble floor. No one spoke, waiting for its return. Elizabeth sat straighter, drumming her fingers on the arms of her carved chair.

Finally the homunculus came back. “Bashir ibn Tariq al-Qurtubi!” it said in a flat voice.

A dark man followed him into the room. Tip stared at him. A man from Al-Andulus. She did not believe in wizards like that superstitious man Burghley, but if she did she thought that this was what one would look like, with his long beard, his striped robe, his turban.

The queen invited the ambassador to sit, and quickly told him what had happened at the manufactory. "Please accept my humblest apologies, Your Majesty," he said. He had a trace of an accent, a smooth liquid sound to his words. "I don't understand what happened. I've never seen them do that, nor heard of anything like it."

"Your apology is not nearly enough, Master Ibn Tariq," Elizabeth said. "Do your people want to destroy our manufactories?"

"No. No, of course not."

"Then what happened? We've paid for your devices, we brought them to our country in good faith . . . Surely these are not the actions of an ally."

"I'll talk to Al-Andulus right away, my lady. Someone there will have an explanation."

"I have a better idea. I'll send some of my men to Al-Andulus, to have a look at these devices. And your men there will explain exactly how they work, and how this could have happened."

"I—I'll have to ask the caliph about that, Your Majesty," Ibn Tariq said.

"Go, then," Elizabeth said. "And hurry."

He bowed and left. So no one in England knew how the homunculi worked, Tip thought. She had always wondered about that. And she saw immediately what Elizabeth was doing, that she was blackmailing the Arabs, making them share their precious knowledge to keep news of the homunculi's rebellion from spreading to other countries. Many people had called Elizabeth a clever queen in Tip's hearing, or a cunning one if they disliked women, but Tip had never understood why before.

Ibn Tariq returned, far quicker than Tip had expected. Did they have speaking tubes that reached all the way to Al-Andulus? How was that possible? "Caliph Ismail agrees," he said. "He'll welcome three of your Englishmen at his palace in Córdoba."

"Good," Elizabeth said. "I thank you." She dismissed him, then turned to Lawton after he had gone. "I want you to be one of those men—you know something about these devices. And you—" She nodded to Tip. "You'll go with him, as his servant."

Tip felt exultant. She was going to Al-Andulus! She would see the place where the engines were made!

"A servant?" Lawton said. "If I'm to have a servant I'd rather have a homunculus." Human workers had become cheaper as more and more of them were displaced by homunculi, and the very rich had started a fashion for homunculus servants, entranced by their novelty.

"Don't be ridiculous," Elizabeth said. "He won't be a servant, not really. He'll be a spy, digging for the secrets of the Arabs' devices. No one notices a servant, or a child. They won't even count him—I'll be able to send three men in addition to him."

The queen looked at each of them in turn. "And you're both staying here, for now," she said. "I want you in the palace, where I can keep an eye on you."

In the next few days tutors visited the queen's workshops at the palace, demonstrating everything they knew about the Arabs' engines to Tip and Lawton. Tip's earlier supposition had been correct, though; no one in England understood very much. Still, she spent most of her time in the workshop, working with the cogs and wheels, tubes and gauges. A lot of her guesses about the devices had been correct, though some had been wrong. She didn't mind about that; all she wanted was knowledge.

Aside from the devices in the workshops all the engines in England had been shut down. Meals were late, rooms undusted, deliveries delayed or lost. Everyone in the

palace was on edge; servants and courtiers argued at all hours, sometimes far into the night.

The tutors also taught them the history and customs of Al-Andulus, something Tip thought was not nearly as interesting. The Arabs had conquered the Spanish peninsula in 711, and in the years since there had been hundreds of skirmishes between Muslims and Christians. Around three hundred and fifty years ago, in the mid-1200s, the Christians had nearly won a battle at Córdoba and had been poised to take over the rest of the peninsula. Then some king had died, and another had taken his place, and the Arabs had pushed the Christians back.

She didn't care about the history, though. All that mattered was that these people existed somewhere in the world—people who thought learning and discovery were important, who pursued knowledge for its own sake, who didn't, like that old man Burghley, yell "Sorcery!" whenever they came across something they didn't understand.

She had another reason for not liking the history lessons: the tutors laughed at her for all the things she didn't know. No one had ever told her, for example, that England was an island. Well, but what difference did it make? She had never had reason to leave it.

But she was leaving it soon, so maybe it did matter. The Arabs were going to take the delegation to Al-Andulus in an airship. She had seen their airships overhead before, of course, but she had never been close to one. What would that be like? How did they stay up there, so high in the sky?

Lawton stayed mostly silent at these lessons. To her surprise he understood less about the engines than she did. Many times she had had to wait for him to catch up, and with the manufactory closed he seemed lost, adrift.

One day as Tip headed toward the workshop she peeked inside a room and saw the queen. Elizabeth sat surrounded by banks of winking lights contained in glass tubes, what Tip had learned to call vacuum jars. A box in front of her glowed with strange green light. Every so often a beeping sound came from the box, and once the queen laughed out loud.

Tip moved softly into the room. Elizabeth turned toward the door. "I know what you are," she said. "You don't have to hide from me."

"What?" Tip said, startled.

"I know you're a girl," the queen said, quieter now. "Did you think your disguise would work on me? I've had to disguise myself, a time or two."

Tip could think of nothing to say.

"And you need to learn something about courtesy, young lady," Elizabeth went on. "You curtsy in front of a queen, first of all, and when you speak to her, you address her as Your Majesty."

Tip had never curtsied; she attempted something that made Elizabeth laugh. "What's that box, Your Majesty?" she asked.

The queen seemed to relent. "It's a game," she said. "See, I have to try to hit this ball here, with this racket, and then return it. Like tennis."

"I thought we wasn't supposed to use the machines," Tip said. "Your Majesty."

"Here's another lesson for you—you must never, ever criticize a queen."

Elizabeth pressed a button on the machine and the green light faded. Tip watched it go with a kind of despair. At that moment she wanted more than anything to play that game, to feel the ball racketing back and forth.

"Why did you disguise yourself, child?" Elizabeth asked.

"To work in the manufactory, Your Majesty."

"But why would you want to do that?"

"I—I didn't have nothing else I could do. My parents died, and I'd've starved otherwise."

"How did they die?"

"They was in a great explosion. In one of the manufactories, in Bishopsgate Street. My mother was waiting for my father to leave work, and then—then they was both dead."

Elizabeth was silent for a while. "I'm sorry to hear it," she said finally. "Fortunately the manufactories are safer now—we've seen to that."

Tip opened her mouth to say something, then closed it, remembering just in time that she couldn't criticize the queen. The manufactories weren't safe, she knew that much. Boys had been burned by steam and hot metal, had tripped over hoses while running to cool the homunculi, had fainted from the heat.

"Didn't you have relatives to help you? Someone who could have taken you in?"

"I don't know, Your Majesty. My parents was farmers once, but they left the village when the machines took over the farming."

Elizabeth shook her head, dismissing the subject. "Well, you'll be on your way to Al-Andulus soon enough," she said. "Burghley and the others think I've lost my mind, sending a child along on a diplomatic mission. But women pick up a good many things that men never see. I was third in line for the throne, you know, and there was no end to the things I learned, just by keeping quiet and listening."

Tip nodded. She knew all about listening, but she was surprised that someone as important as Elizabeth knew it too. "Are you going to tell Master Lawton?"

Elizabeth laughed again. "That man? He'd faint if he knew a girl was looking after him. No, this will be our secret." She turned back to her game. "Well, that will be all," she said.

Tip curtsied again and continued down the hallway to the workshop. Lawton stood ahead of her in a corner, talking quietly to a few men. He stopped speaking as she passed them, and looked at her suspiciously. What was he up to? Who was he talking to?

She went into the workshop and saw that someone had laid open the insides of a water-clock. She hurried to the work table and picked up her tools and forgot all about Lawton.

A week later Tip, Lawton, and two others chosen by the queen were driven in steam-cars to Finsbury Field. A silver airship nuzzled up against a mast there, rocking when the wind gusted. Arabic writing flowed across its side; Tip had seen that same writing on the engines at the manufactory.

A young bearded man wearing robes and a red and gold turban bowed to them and said, "Welcome to the *Buraq*." He led them up a swaying rope ladder and into a basket underneath the airship. When they were all inside he handed each of them a pair of goggles and showed them how to put them on. He wore his just below his turban, giving him an owlish look.

Workmen came carrying one of the homunculi from the manufactory. Wires trailed from its waist, and one of its arms reached out at a strange angle. Sunlight gleamed off its copper surface. Tip wanted to look at it some more, to study it, but they stowed it in a compartment with the other baggage.

The airship lifted silently. The unfamiliar sensation brought Tip's stomach up into her throat, but she ignored it and watched, entranced, as the ground dropped away beneath her. A roar started up close by, sounding like some huge creature, but it went on and on, never stopping for breath. "Those are the engines," their guide said, shouting to be heard.

Wind came up, billowing the Arabs' robes. Tip adjusted her goggles and watched as the Thames dwindled to a road, a ribbon, a thread. Then they left London behind and flew out over the countryside. Fields and meadows passed be-

neath them, all different shades of green, like the palette of a painter in love with only one color.

A while later the green turned blue, and she realized they were flying over the ocean. The land on the other side of the ocean looked like the English countryside, with every so often a town or city set down within it. Then, as if they had crossed an invisible line, the landscape changed: the farms became neat squares, the crops arranged in straight rows.

"That's Al-Andulus below," their guide said, sounding glad to be home. She thought they were close then, but the airship flew on for a few more hours. Finally they began to descend, dropping low enough that she could see the long rounded shadow of the airship, rippling over small hills on the ground.

A huge landing field lay beneath them now. Men hurried along the ground and caught hold of ropes dangling from the ship. There were other airships on the field as well, docked there or lifting off or landing.

The noise of the engines stopped. The men on the ground worked to tie the airship to a tall mast. One of the crew threw the rope ladder from the basket; it swayed with the motion of the ship, but the Arabs began to climb down before it had a chance to settle.

Tip came last down the ladder, her heart pounding hard. She was in Córdoba, city of marvels, the place she had heard about all her life.

Their guide led them to a line of coaches at the edge of the field. They went up into the second coach, which had cushioned benches along both walls and a Turkish carpet on the floor. Windows lined the walls, their tops arched like horseshoes, and the ceiling was vaulted like the nave of a church.

A deafening whistle came from the first coach, and then a loud roar, and the carriage jerked and began to move. Lawton glanced around nervously. "What—" he said.

"Don't worry," their guide said. "It's just a train. Carriages all in a line together, like camels in a caravan. Caliph Ismail's father built it—he wanted a direct line from the airfield to the palace."

Tip knelt up on the bench and looked out the window eagerly. She saw well-paved streets with no open sewers, covered markets, silk flags, great domed buildings whose purpose she couldn't imagine. Orange trees lined the streets, and another tree she couldn't identify, something that looked like a feather duster turned upside down. A mechanical horse rode up to the train, and its rider turned a peg on its neck to stop it. A long train of airships passed across the sky, tied nose to tail like a string of ponies.

The light outside the windows began to fade. Gas-lamps came on in the streets, and shone through the wooden lattices of the houses.

Finally the carriage came to a halt and they stepped out into a small room. At first Tip couldn't take in the richness of the decoration, every inch of the walls and ceiling covered in filigrees of stars and diamonds and moons and flowers. Pillars held up the ceiling, and the doors and windows were arched like the ones inside the train. And everything was brightly colored, gold and red and midnight blue, glittering like a hoard of jewels.

They didn't have time to look around, though. Another guide came to take them down a hallway past room after room, each one bigger and more elaborate than the last. Several doors were closed, with homunculi standing outside and guarding them with swords. Finally the guide opened a door and ushered Lawton inside.

Almost too late, Tip remembered that she was supposed to be the man's servant. She darted in after him, and the guide showed her into a little room off the main one. It was filled with wonders, but she found to her surprise that she was too tired to examine them. She dropped into a comfortable couch and fell asleep immediately.

Lawton woke her the next morning, pounding on the door. "You! Tip!" he said. "Go and get me a chamber pot—I can't find one anywhere!"

Tip sat up, groaning. She had gone to bed fully clothed, and her breasts ached from the binding she used to flatten them. She couldn't loosen it now, though.

She went out into Lawton's room. Just as he had said, there was no chamber pot anywhere. She opened another door leading off his room and peered into it blearily. A bowl like a large chamber pot stood there, filled with water—but why was it fastened to the floor?

She looked up and saw a chain hanging from a tank above the pot. She tugged on it, and the water swirled away noisily. "Pull on this when you're done," she said to Lawton, pointing to the chain.

He closed the door, and a while later she heard the roar of water again from inside the room.

When he had finished she used the small room herself and then got dressed. A short while later the guide returned to take them to the caliph, stopping to pick up the other two members of the delegation. They passed through more bright rooms, now lit by the sun shining through their windows, then a courtyard with a pool in the center, the walls hung with silk banners rippling in the wind. The palace continued on the other side, and they went into another room, this one guarded by more homunculi. The guide spoke a word to them and they opened a door.

"*Salaam aleikum*," said a lean man seated on pillows at the far end of the room, and the guide translated, "Peace be unto you."

Lawton and the other men bowed, and Tip realized that this must be Caliph Ismail. She bowed quickly—too late, but fortunately no one noticed.

"Sit, please," the caliph said. He had a beard, like all the other men they had met, though his was longer, down to his chest, and streaked with gray. He wore a pure white robe embroidered in red and gold and embellished with jewels, and his turban was twisted up into spikes, like a crown. He smiled at everyone in turn, even Tip.

There were no chairs at all in the room. One of the men lowered himself carefully to a pillow, and the rest followed.

"Is it wise to have those here, Your Majesty?" the head of the delegation said, a man named John Gifford. He pointed to the armed homunculi standing in a semi-circle behind the caliph.

The guide translated. "Of course," Caliph Ismail said. "None of our homunculi have rebelled."

"They still might," Gifford said. "We never thought that ours would."

"We believe that something went wrong with the homunculi we sent you. We are working on that now."

"But what? What could possibly make them do such a thing?"

"We'll take you to our workshops in a moment. For now, though, I insist that you take refreshment with us."

He clapped his hands, and more homunculi came into the room, each carrying a tray. One passed out plates piled with food, and another cold glasses. Tip was served last, and she wondered how the homunculi knew to do that.

"*My Lord*," someone said, awed, and Tip finally glanced down at her plate.

Nothing looked familiar. The guide pointed to the food and gave the English words for them: "Watermelon, apricot, pomegranate . . ."

Tip tried the watermelon, then ate the rest eagerly.

When they were finished the guide led them to the workshop. Tip followed, barely able to take in the surroundings in her excitement. Finally she began to hear the sound of metal grinding, of men calling out to one another. They turned a final corner and came to a large room filled with tables. Tools and engines and scraps of met-

al were everywhere, and the noise was almost deafening now, engines screaming, men shouting, metal clanging on metal.

The guide led them over to one of the tables. Someone came toward them as they approached, a stocky man with black skin, graying hair under his turban, and a short frizzy beard. Another thing she never had known, she thought—that people came in colors different than her own.

"This is Akil ibn Suleiman," the guide said. "He works with the homunculi." Then to Ibn Suleiman, he said, "This is the delegation from London, Masters Gifford and Blunt and Lawton."

"*Salaam aleikum*," Ibn Suleiman said, speaking loudly over the din. "This is the *a'mil*—the homunculus—you sent over from England," he went on in English. He gestured to the copper torso, lying open on the table; it was packed tightly with large and small gears. "This is the main clockwork, here," he said, pointing.

"What about the head?" Gifford asked.

"The head has more gears," Ibn Suleiman said. He picked up the head and unscrewed it carefully, then tugged on it until it broke apart like a nut. "See? Like the torso."

"Is that how it thinks?"

"It doesn't think, not really. Its gears—the gears are constructed in such a way that it has to perform the motions it does. It follows the program we give it—it can't come up with ideas on its own."

"Well, but it did," Lawton said, speaking for the first time. "I saw it."

"Yes, and that's what we have to work out."

Tip poked Lawton in the arm. He turned to her impatiently. "Ask him," she said, speaking as softly as she could. "One homunculus can't think on its own, but what about fifteen or twenty? What if they all joined up together?"

"What?" Lawton asked.

But Ibn Suleiman had turned to her while she was talking. "Yes, we thought about that," he said. "If you put all the gears in all the homunculi together, and if you configured them the right way, well, maybe they could start to think on their own. But we haven't seen any evidence that this one was talking to the others. How could it, after all?"

He was looking at her closely. "I don't know," she said, backing away.

"No, it's an interesting question. Who are you?"

"I—my name's Tip."

"Just Tip? English names are strange, but I never heard of one like that. *Salaam aleikum*."

Tip picked up a few gears that had come out of the homunculus and moved them around until they fit. She and Ibn Suleiman began to work together, handing each other gears and tools, speaking in short phrases. The others moved off, but she barely saw them go.

A while later a loud melody broke into their work, a voice singing something fluid in a minor key. She looked up at a clock and saw to her amazement that it was already noon. The voice was coming from speaking grilles in the corners of the workshop.

The workers put down their tools and headed out. Tip tugged on Ibn Suleiman's robe as he turned to go. "What—what are they doing?" Tip asked.

"We're going to prayer," he said. It had never seemed to occur to him that she wouldn't join him. "You should—I don't know—maybe you can find some food somewhere."

She realized suddenly how hungry she was, how hard she had worked. The guide had shown them the banqueting room that morning; she headed back to it and managed to get lost only twice.

She went inside and sat down on a cushion, and a homunculus came to serve her. Gifford and Blunt came in soon afterward.

"And I still say they won't tell us anything," Blunt said as they sat down. "This tour they gave us—it was to confuse us, nothing more."

"Why would they want to do that?" Gifford asked.

"Haven't you worked it out yet, man?" Blunt looked around and saw only Tip; all the Arabs were sitting in a group on the other side of the room. He lowered his voice. "They're the ones who made the homunculi rebel. Who else could do it? Who else would know how?"

"There are other schools of natural philosophy in the world—" Gifford began.

Tip was too impatient to let him finish. "But that's stupid," she said to Blunt. "Why would they send us machines that don't work?"

"You keep a civil tongue in your head, young man," Blunt said.

"Well, but why—"

"They're subtle, that's why. Crafty. I don't know why, but they'll have some reason. Where's your master, anyway?"

"Master Lawton? I thought he was with you."

"Yes, well, the three of us are meeting in my room this afternoon. You'd better find him and make sure he doesn't forget."

Tip returned to her food. She didn't want to argue with this man, not when he didn't understand logic.

"As I was saying, though, there are other natural philosophers," Gifford said. "Other nations where people have devised homunculi and air travel and all this other wizardry. Japan, for example."

"Yes, but why would they want to harm our queen?" Blunt asked.

"Not Japan, then. But you have to admit that she has no shortage of enemies. The pope says she's illegitimate, and so do all the Catholic countries—France, and Spain—"

"Spain?" Tip said. The two men turned to look at her. "I thought—I mean, I thought the Arabs drove the Spanish out of Al-Andulus."

"So they did, mostly," Gifford said. "All except for one province in the north. Léon, it was called, though they call it Spain now, España, as if one province can stand in for an entire country."

Tip nodded. She remembered now; one of the tutors had mentioned Léon.

"But the Spanish are powerless, aren't they?" Blunt said. "The country's so tiny you can hardly see them on a map."

"Not powerless anymore, unfortunately. Not for a century, ever since that adventurer of Alfonso and Isabella's discovered the New World. They've been bringing back gold by the shipload."

"Yes, but where would they get the knowledge?"

"They'd buy it, of course. The way they get everything these days."

"Pah," Blunt said. "Spain and France are at least Christian countries. The people here are unbelievers. They pray to some kind of moon god. And do you know what else? There are Jews here, out in the streets, worshipping openly."

"What are Jews?" Tip asked.

"Stop asking so many questions," Blunt said. "And go find your master—he won't want to miss our meeting."

She did wonder where Lawton had gone to, but not enough to look for him. Instead, after lunch, she went back to the workshop and spent the afternoon working with Ibn Suleiman. The queen would want her to, she thought, and Lawton could look after himself.

But that evening, as she opened the door to their rooms, she found Lawton there,

looking furious. "Why didn't you tell me about the meeting this afternoon?" he asked.

"I was busy," she said.

"Busy! You're my servant, you're meant to be helping me—"

"I ain't your servant! The queen told me to find out how them monkeys work, and that's what I was doing."

"The queen! She should be in Bedlam, along with all the other lunatics. What was she thinking, sending a child on state business?"

"I understand them monkeys, that's why she did it. I know more about them than you do."

"That's ridiculous. I know things you can't even dream of. And what does she care how they work, anyway? She did the right thing for once and closed all manufactories in England—why in God's name would she want to start them up again?"

Tip stared at him. "She can't close the manufactories. It's like—like one of them steam-cars, going downhill. Once it starts you can't stop it. And we have to learn how to make airships, and that train that we rode on, and—and all of it, everything them Arabs know how to do."

"You have no idea what you're talking about. You're a country boy, aren't you? I can tell from your speech."

Tip nodded.

"And your parents were farmers?" He went on without waiting for Tip's answer. "Tell me—what happened when the homunculi took over your parents' work? When they lost their land, the place your family had farmed for generations?"

"We came to London. London ain't so bad."

"No? Ask your parents what they think about that. My story's the same—I made shoes for a living. And my shoes were damned good, if I say so myself. Each and every one of them turned out by hand, nothing like those shoddy pieces of work coming out of the manufactories these days. I was about to take on my first apprentice, expand my workshop, make enough money to find a wife and settle down—and then I noticed that people were no longer buying my shoes, were getting them from the homunculi just because they were cheaper . . ."

Tip didn't know what to say. She had never heard Lawton go on for so long. And she hadn't thought about the manufactories as much as he had, about all the problems they had caused. Her parents had died because of them, though—and when Lawton had mentioned her parents it had felt like a dagger stabbing her to the heart.

But she wasn't ready to turn her back on all the new devices, especially now that she was learning more about them. "Well, but you got other work. You ain't starving."

"No? I make about half as much money now as I did when I was a cobbler. Anyone can run a manufactory, or so the owners tell me. And this trip Elizabeth forced me to go on—she isn't paying me a groat for it."

"You want to be *paid*?"

"Of course I do. I'll be a pauper when I get back to England at this rate."

"Well, but how many people can say they been to Al-Andulus? How many people've ridden in an airship?"

"Oh, never mind," Lawton said. "You'll understand when you're older."

He started getting ready for bed, and she went into her own room. She was pleased to see that someone, homunculi probably, had tidied up and made her bed. Lawton wouldn't need a servant at all here; the homunculi would do all the work, and she would be free to visit the workshop.

She was lying on her soft sofa and half asleep when she realized that he had never told her where he had been that day.

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She went back to work with Ibn Suleiman the next day, and every day after that. She discovered that the homunculi would bring her food and drink in the workshop, and she began to spend all her time there. Three times a day, at noon, midafternoon, and evening, all work came to a halt and everyone went off to pray, but she continued on, showing Ibn Suleiman what she'd done when he came back. She had never seen people who prayed so much, and she was even more surprised when Ibn Suleiman told her that they prayed before and after work as well, five times a day.

Ibn Suleiman appeared to take her as she seemed, as a boy who was able to pick things up quickly. She wondered if he was like her, someone who concentrated only on his work, who spoke little because he was bad at conversation. Then, one day after he had returned from noon prayers, he asked, "Where did you learn so much about these engines?"

"I worked at a manufactory," she said.

"Do they let boys as young as you work in such places?" he asked.

"I ain't so young."

She held her breath, hoping he believed it. He seemed to, because his next question was about something else. "Was that the place where the homunculi rebelled?"

She nodded.

"But what about the Master of Safety? Where was he?"

"What's that, then?"

He stared at her a moment. "Every manufactory here has to have one. That man over there—he's ours. He looks over everything we do, makes sure we keep to the rules of safety."

She turned to look where Ibn Suleiman pointed, and as she did she saw a group of workmen clustered around an engine with propellers. "Is that for the airships?" she asked. "Can I go watch?"

He laughed. "Yes to your first question, no to your second. Caliph Ismail said to show you the homunculi, nothing else."

"But how am I going to learn if I can't see anything?" she asked, impatient. "How do them ships stay up in the air like that?"

He laughed again. "You know, it's a beautiful day outside. Why don't we go and get lunch, and I can show you Córdoba."

Tip agreed eagerly. They left the workshop, and Ibn Suleiman led her down several corridors to a part of the palace she had never seen.

Finally they came to an arched doorway. A brass head stood on a pillar near the door, and as they reached it it spoke, saying something in Arabic.

Ibn Suleiman answered, saying his name and Tip's. It must keep track of the people who leave the palace, she realized. She thought of Lawton briefly, wondering again where he went to and if the head could tell her, and then the door opened and she forgot all about him.

A garden stretched out before them. She saw flowers reflected in shallow pools, a fountain held up by four stone lions. The sun beat down on them, its light shimmering off the water. Ibn Suleiman chose one of the paths leading away from the palace, and she followed him.

She turned around once, to see a pair of homunculi guarding the entrance to the palace. The homunculi made no move to stop them, though; she guessed that they only concerned themselves with the people who tried to enter.

They continued on, to a gate in a stone wall. Ibn Suleiman opened it, and they went through.

The street outside was noisier than anything Tip had seen in London. People in robes hurried past, and steam-cars and mechanical horses moved down a paved road

alongside them. A great steam-car with open sides stopped with a huff of air and people clambered aboard, holding onto poles at the sides for balance.

Tip hoped they would get on the steam-car, but Ibn Suleiman continued walking. They passed more stone walls, some of them painted with images of steam-cars or airships or trains.

"What are them pictures for?" Tip asked.

"Every Muslim must try to make a pilgrimage to Mecca once in his life," Ibn Suleiman said. "And some of them, after they make the journey, they show on their walls how they got there."

"Why do they want to get to Mecca?"

"Let's sit down, and I'll answer all your questions then."

The street opened out, and they entered a labyrinth of booths and carts, all piled high with the food she had eaten in the palace, oranges, apricots, eggplant. Four homunculi stood in an open space playing music, their drums and lutes fused to their bodies.

Ibn Suleiman turned down a narrow road with rows of shops on either side. There were no steam-cars here, but the press of people was even thicker than before. A wooden lattice covered the street to shield it from the sun.

He sat at a low table in front of one of the shops, and indicated to Tip to take the seat across from him. A man came outside, and they had a quick conversation in Arabic.

"Now then," he said. "Which of your many questions would you like to ask first?"

"Where did you learn to speak English?" Tip asked.

"I went to England once, to help set up a manufactory. That's one of the reasons the caliph chose me to work on your homunculi."

That hadn't really been the question she wanted to ask, though, just the first one she had thought of. She was silent a while, ordering her thoughts. "Why can't we make our own homunculi, in England?" she asked. "And—and all the other devices, everything you have here?"

"I don't know. I can tell you what I think, but I don't wish to offend you."

"What do you think, then?"

"Well, the prophet Muhammad, peace be upon him, said, 'Are those who have knowledge and those who have no knowledge alike? Only the men of understanding are mindful.' He taught us to learn as much as we can about this world, to study all of Allah's creation. That's why Taqi al-Din Muhammad ibn Ma'ruf was able to invent the steam engine, and why all the other natural philosophers who came after him could build on his work. But Christians, well, they seem afraid of what they don't understand. In Léon, in the north, you know, they burn books that don't agree with them."

She said nothing, thinking about a book-burning she had seen once in London. The man Ibn Suleiman had spoken to came out of the shop and set plates filled with food in front of them. She took a bite of a piece of meat on a skewer; juice ran down her chin and she wiped it away with her hand.

"Maybe you could come and study at the university here," Ibn Suleiman said. "I met students there from all over; England, France, the Low Countries. You could ask your parents, when you're a little older."

"I don't have parents."

As soon as the words were out she wished she could call them back. The only person she had ever told about her parents' death was Elizabeth, and that only because she could not disobey the queen.

"Why not? What happened?"

He seemed to truly want to know. She told him about the explosion, about waiting

for days for her parents to come home and finally learning that they had died. "I'm very sorry," he said when she had finished.

She shrugged.

"Could you—would you like to come to dinner some evening?" he asked. "I would like you to see my house, meet my wife."

"I didn't know you had a wife."

"I do." He smiled. "No children yet, alas. I stay in the palace while I'm working, but sometimes I go home to visit her."

She wanted badly to accept, but she knew better than to get close to someone. She thought about his house, his wife, and suddenly she realized something.

"Where are all the women?" she asked. "I ain't seen any since I got here."

"Women?" Ibn Suleiman said. "Women are too gentle to leave their houses, to come into the rough world of men. How could they survive out here?"

She could tell him, but it would mean the end of their conversation, of every conversation. So this place wasn't perfect after all, she thought.

"There was a woman at the university, now that I think of it, a brilliant mind," Ibn Suleiman said. "She was unusual, though."

I'm unusual too, Tip wanted to say. It was on the tip of her tongue to confess, to tell him everything.

She frowned. Someone who looked like Lawton was walking on the other side of the street. A homunculus walked next to him—but one like nothing she had ever seen, a dazzling white, shining in the light that came through the lattice overhead. It wore a helmet with wings reaching to its shoulders, and a suit made of carved panels that covered its chest and extended to its thighs like a skirt. The hilt of a sword showed above its belt.

The man turned toward her, and she saw that it was Lawton. He said something to the homunculus, and it hurried across the street, heading straight for her.

She stood quickly, overturning the small table. "What—" Ibn Suleiman said. He saw the homunculus and said, "Run. Hurry. I'll meet you at the palace."

She struggled through the crowd, her heart beating fast. She came to the end of the covered street, tried frantically to remember which way they had come, then headed left. Someone cried out, and she turned to see the homunculus coming toward her, pushing people out of the way.

She ran faster, entering the crowded maze filled with booths and carts. A cart stood in her path and she slammed against it. It broke apart; eggplants and oranges rolled away over the ground.

The cart's owner shouted after her angrily. She risked a look back. The homunculus stumbled on something and nearly fell, and she hurried on.

Another booth loomed up in front of her. She overturned it as she ran, and heard a loud clatter as all the contents fell to the ground. There had been nothing that would stop the homunculus among them, though—and when she looked back she saw that it hadn't even slowed. The next cart held more fruits and vegetables, and she pulled it down as she passed.

The line of carts ended, and she came to the part of the street with the painted houses. She was panting hard now, gasping, sweating in the hot sun. Her legs ached. The homunculus came closer. She reached the gate to the palace and pulled it open, then slammed it shut behind her.

She heard the gate open again, but she couldn't stop to look back. She ran past the pools and fountains and came to the palace door. The two homunculus guards moved in front of it to block her.

"Tip!" she cried, hoping that they were somehow connected to the brass head, that they knew her name. "I'm Tip!"

The homunculi separated, and the door opened. Tip ran inside just as the white homunculus reached the door. The caliph's guards stepped together again, and the door closed.

Tip opened the door a crack and peered out. They were fencing, the two guards arrayed against the white homunculus. Light glinted off the brass and copper of the caliph's homunculi, and the white sword of their opponent flashed in the sun. Even from her place behind the door Tip could hear the clanging sound as they hit, and a strange clacking, like a machine gone wrong.

The white homunculus's sword was longer, with a greater reach against the curved swords of the guards. It engaged one of the guards, and the second one moved to its other side, boxing it in. The white head swiveled back and forth, trying to keep them both in view.

The first guard drove its sword down hard. The hand of the other homunculus broke with a loud crack, and its sword fell to the ground. It still came on, though, using its arms as swords, swinging them against the attacks of its opponents.

The guards pressed in closer, slowly pushing the white homunculus away from the caliph's door, toward the gate. One guard crouched in low and thrust its sword into its opponent's torso. It stumbled and righted itself, then trembled all over, making a loud rattling noise. Then it toppled in sections, first its legs, then its chest, then its head. The guards stabbed it a few times, and returned to the door.

Only then did Tip feel the full horror of what had happened. The homunculus had tried to kill her. It nearly *had* killed her. And Lawton had spoken to it, Lawton was the one who had ordered it to go after her. But why? Why did he want her dead?

She was trembling like the homunculus, as if someone had stabbed her. She could not return to the room she shared with Lawton, that much was certain. But where could she go?

The homunculus had left the garden gate open, and now Ibn Suleiman came through it. She felt relieved to see him, but she could not face leaving the palace to go to him, could not bear to look at the white homunculus and its broken hand. As she watched Ibn Suleiman bent over its body, a worried expression on his face. "Here!" she called out. "I'm over here!"

He saw her and hurried to the door, then spoke his name to the guards. "What happened?" he asked as he came inside.

"I don't know," she said. "He—Master Lawton, he said something to the homunculus, and it came after me. What is it? I never saw anything like it in my life."

"It's from Japan," Ibn Suleiman said. "They know a good deal about steam, about these devices, over there. It's made out of pearl and whalebone."

The word Japan meant nothing to her. "What's Master Lawton doing with it, though?"

"I don't know. Where could he have met people from Japan, and what do they want with him?"

"Never mind that. Why does he want to kill me?"

Ibn Suleiman frowned. "I don't know that either. Well, from now on you're staying with me, in my rooms. And I'll speak to the caliph about this."

Tip's life shrank down to two places, Ibn Suleiman's quarters and the workshop. At first he ordered her to stay in his rooms at all times, but she went nearly crazy with boredom and begged to be allowed to go back to the workshop.

"I must be insane to agree, but—very well," he said. "But promise me you'll be careful, that you'll keep watch for this man at all times."

She nodded. His words reminded her of something, but it took a long time before

she realized what it was. Her parents had scolded her in just that way, half caring and half angry. She felt her own anger then, at him, for reminding her of them.

But in one way he was nothing like her parents: he wanted to teach her new things, to impart to her the knowledge of Al-Andulus. He brought her books in English, though most of them were too hard for her to read. And he talked to her after work, a little every day: about the order of the planets and the names of some of the stars, the rules of a strange and wonderful system called algebra, how to put a poem together.

She found that he was given to long philosophical musings, something he had learned at the university he'd spoken of. "Muslims, you know, we lived in desert countries, mostly," he said one day. "And then we came here, to Al-Andulus, and we fell in love with its water, with the richness of its soil. The first thing we did was create pools and fountains, so we could see that water always. And then we built walls, courtyards, to keep out the desert, and planted our date palms and orange trees. The imams say that paradise, the place we go to when we die, is a walled garden. But it seems to me that this is paradise here, paradise on earth, blasphemy though it is to say so."

"It's funny, though," he went on. "It's the Christians who have put up the most important wall of all, a wall between our two countries. So no one can ever escape from Léon, no one can come here and see that a different way of life is possible. And now they're fighting us at the border, more and more of them. They say we've grown weak here, spending all our time making fountains and gardens. And perhaps they're right. Perhaps we should listen to them. Allah knows King Philip of Léon wants to start a war—he's said so often enough."

One day, while Tip was leafing through a book on architecture, Ibn Suleiman came into the room, looking worried. "I managed to see the caliph today," he said. "He'd never heard anything about a Japanese homunculus. I made him go out into the garden with me, but it was gone by then. But who took it? Was it the people Lawton is working for, whoever they are? I asked him to question Lawton, but he says he can't, that the man is his guest. And relations with England are delicate right now, and he can't treat Lawton as an enemy, no matter what he is planning—especially if no one can vouch for our story."

"So what do we do now?" Tip asked.

"The caliph did allow me to do one thing—he said I could question the brass head, to find out how many times Lawton has left the palace. He's gone outside a total of nine times. But even that, the caliph says, is not necessarily suspicious—perhaps the man simply wants to see the beauties of Córdoba."

Tip laughed harshly. The idea of Lawton enjoying the beauty of anything was ridiculous.

"Are you being careful?" Ibn Suleiman asked. "He hasn't seen you here, has he?"

"No," Tip said. "Never."

The day after that Tip and Ibn Suleiman reached the last layer of clockwork in the torso. As they brought it out Tip saw crude notches scored in the gearwork. "Look at that!" she said, excited.

Ibn Suleiman took a monocle from a pocket somewhere and put it in his eye. "The homunculi rebelled against their tasks in the morning, isn't that what you said?"

"That's right," she said. "Just after we started up for the day."

"So someone probably went into the manufactory the night before and made these notches. And the homunculi followed the program this person made for them."

"A program to do what? To throw things?"

"I think—" They fitted the gears back inside the arms, moved the arms around. "Yes. Look."

"But who? Who made these notches?"

"Could it have been Lawton?"

Tip laughed. "Him? He wouldn't know how. But maybe he opened the manufactory late at night, let someone in."

"Maybe," Ibn Suleiman said. He took off the monocle, straightened up, and looked at Tip. "Well, we're finished here. We've answered the caliph's questions. I'll go tell him."

He left the workshop. Tip watched him go with a kind of despair. If they were finished that meant that Queen Elizabeth would call them back to England, that she would have to leave Al-Andulus. And what would happen when they all got on the airship together? Would Lawton try to kill her again? She saw him pushing her over the side of the basket, saw herself plummeting down to earth. . . . Her stomach contracted in fear.

Well, if she was about to leave Al-Andulus, she would take one last look around, maybe even try to see the caliph and tell him about Lawton. She went to the door of the workshop and peered outside. Lawton was nowhere in sight, but she could see Ibn Suleiman heading away from her, and she set off after him.

She hung back as they went through the corridors, not wanting him to see her and send her away. A door guarded by two homunculi stood along the corridor; it opened just after he passed it, and to her horror Lawton stepped outside. He looked up and down the hallway and she jumped back around a corner just in time, her heart pounding.

What was he doing? She peered around the corner and saw him stuff a sheaf of papers into his shirt. Why didn't the homunculi stop him? But they stood by the door as still as statues, doing nothing.

He headed away from her, and when the corridors branched he took a different direction from Ibn Suleiman. She went after him cautiously, keeping him in sight.

He took several more turns, until she became thoroughly lost. He walked with confidence, though, as if he knew exactly where he was going. Finally they went around a corner, and she saw they were near the room with the brass head.

Lawton was going to leave the palace. And then what? Was he meeting someone? Would he give away his stolen papers?

Who, though? What if he worked for Queen Elizabeth? Maybe she had given him an assignment, just as she had given Tip one—only his was to steal the Arabs' secrets. And in that case she, Tip, was interfering in the business of state. Shouldn't she just let him go?

She shook her head. She was not going to let him get away with it. Anyway, he had tried to kill her—he could not be up to anything good.

Lawton had come to the room with the arched doorway leading outside. The brass head spoke, and he said his name curtly. The door opened and then closed behind him.

Tip followed and gave her name to the head. When the door opened again she saw that Lawton was hurrying now, almost running, that he had reached the lion fountain and was halfway to the gate.

She ran after him. He was far ahead of her now, and she forced her legs to move faster. Once he stepped outside, she knew, he could easily get lost in the crowds.

A mechanical horse stood near the fountain. Without stopping to think she jumped on its back and turned the peg in its neck. It lurched forward awkwardly, clattering against the footpath. Lawton looked back, then put on a burst of speed.

He came to the gate and opened it. She followed him through it, into the street out-

side. The horse continued straight out into the road, and as she looked up she saw a steam-car headed directly toward her. She fumbled for another peg and turned it, and the horse veered to the right just in time.

She looked around for Lawton, saw him pushing his way through the crowd. She reached for the first peg and dialed it up as far as it could go. The horse bolted; people scattered out of its way. She clung hard to its back to keep from being thrown off. Sharp metal bit into her arms and legs.

One of the long open steam-cars headed toward them, and Lawton slowed. He tried to jump on but missed the pole. A man holding onto a pole reached down to him, and at the last moment Lawton passed up his papers.

Now what? Should she follow Lawton or the man in the open car? She was upon them before she could decide. She turned the second peg quickly and the horse crashed into Lawton and knocked him down. The steam-car drove off.

She started after the car, knowing that she couldn't possibly catch up with it, that it was going far too fast. "Stop!" someone shouted behind her.

She looked back. Another mechanical horse was coming up behind her, ridden by a man in red and gold, the caliph's colors. "He's getting away!" she said, stopping the horse. "He—Master Lawton—he gave the man in that car something, some papers, and he's getting away!"

A steam-car pulled up next to them, and the caliph's man called something to the driver in rapid Arabic. The car hurried down the road.

"Now then," the caliph's man said. "What happened here?"

Tip sat on cushions in what was probably the only bare room in the palace, watching the caliph's men interrogate Lawton. A man translated everything into English; one of the interrogators had said they would have a good many questions for her later. Caliph Ismail himself sat to the side, saying nothing.

"Why did you steal those papers?" one of the men asked.

"What papers?" Lawton said. "I didn't steal any papers."

"We have a witness who says that you did."

"Tip?" Lawton tried to laugh but it sounded false, even to her. They had been questioning him for several hours now, and he was starting to tire. "He's—what? Ten, eleven? Are you going to take the word of a child?"

"He saw you come out of the Hall of Records, carrying something."

"Nonsense. I was nowhere near that room."

"What room is that? How do you know where it is?"

"I—I have no idea. I mean I wasn't anywhere near any room with records in it. Why would I be?"

"Why? So you could give information to someone."

"To who?"

"To that man you handed the papers to. And Tip wasn't the only one to see that—we have other witnesses."

"I don't know what you're talking about."

"No? We captured him, you know, your accomplice. And he had some very interesting things to say about you."

Lawton turned pale. "I don't believe you," he said finally. "Why didn't you tell me this before? You're bluffing."

"Not at all. We know it all now, everything you're trying to hide from us. We just want you to say it—the caliph will be more lenient if you confess."

Lawton turned to Caliph Ismail, who sat impassively. "I—well, suppose I did give some papers to someone. What would happen to me?"

The caliph said nothing. "Look, I needed money," Lawton went on. "It's all your

fault, anyway. If you hadn't invented those—those damnable devices I'd still be working as a cobbler. I'd have apprentices, and—and the respect of my fellows, and enough money to take a wife and settle down...."

"And who offered you that money?"

"Spain. The Spanish."

"Spain!" another man said. "What on Earth did they want?"

"I thought you knew," Lawton said spitefully.

"Tell us."

"What everyone wants. The secrets of your engines. I found some diagrams in the Hall of Records that looked right and I took them."

"Ask him," Tip said. Everyone turned to look at her. "Why was he talking to that Japanese homunculus?"

"The Spanish wanted to know how the homunculi worked," Lawton said. The translator spoke rapidly behind him. "No one can get inside yours without destroying them, so they bought some from the Japanese. They learned a lot, enough to figure out how to open yours, and how to make them rebel. And then later I had to work out how to get past the homunculi at the Hall of Records, and they helped me with that."

"Did you let the Spanish into the manufactory?" Tip asked.

Lawton said nothing.

"You did, didn't you? And then you tried to blame me for it, just 'cause I tried to stop them monkeys. Why did the Spanish want to make them rebel, anyway?"

"I don't know. They told me very little."

"Why did you want to kill me?"

"You saw me with the Japanese homunculus. I thought you might become suspicious."

"Suspicious! I got suspicious when you tried to kill me!"

"Very well," Caliph Ismail said. Everyone turned to him. "We've questioned him enough for now. Take him away."

"No," Lawton said. Two men pulled him roughly to his feet. "No, you promised . . . What are you doing? What will you do to me?"

"I don't know yet," the caliph said. "We haven't finished talking to you, though."

The men took Lawton outside. He continued calling out, his cries growing fainter and fainter as they took him away.

"What *will* you do with him?" the man next to the caliph asked—Tip had heard him called the vizier.

Caliph Ismail sighed. "I truly haven't decided. Right now I'd like to put him to death, but Queen Elizabeth might object—he's an English subject, after all. I'll have to talk to her, see what she wants."

"I agree—you should have him killed," the vizier said. "You're too lenient sometimes."

"But is it good to take a man's life, the life Allah gave him?" The vizier said nothing, and Ismail went on. "Still, no one should think they can steal our secrets."

He looked at Tip. She felt as if he saw deeply into her, knew how her parents had died, how she had cried for days, how hunger had driven her to look for work. But he said only, "Did you know anything about this? Were you working with that man?"

"No, Your Majesty!"

"Why did you help us, then?"

She stopped, realizing she didn't know. Even when she thought Lawton might be working for Elizabeth, she had gone after him. She had thrown her lot in with Al-Andulus for good, she saw, had taken the side of philosophy and reason over superstition. Even though they locked up their women—but she was not free in England either, she had had to disguise herself in both countries.

She couldn't think how to explain it, though. "I—I like your devices," she said.

Caliph Ismail laughed. "Well, we didn't get his accomplices after all—we were bluffing about that. And it looks like he took something important—the plans for some very powerful weapons. They're going to invade us, the Spanish, and I don't know if we'll be ready for them." He turned to the vizier. "You did warn me, my old friend. You said we should have been building an army, instead of listening to music and studying the stars and reciting poetry."

"I said we could do both."

"Yes. And we should have. Well, we'll have some time, until they learn to build those terrible weapons. I still don't understand why this man Lawton destroyed his own manufactory, though."

"It's obvious, now that we know who was working against us," the vizier said. "The Spanish wanted to cause a rift between us and the English, so that if they went to war with us the English wouldn't help us, wouldn't jump at the chance to fight against their old enemy Spain. And when that didn't work, when the English sent people here to find out what went wrong, they were able to send along their own man, someone who could spy for them."

"Well," the caliph said. He clapped his hands. "It's time we got to work. I want to know how that man got past the homunculi at the Hall of Records. They're supposed to protect us against spies like him. You, Tip—is that your name? Take the homunculi to the workshop and start looking into it. And I think we'll have to buy our own homunculi from Japan and see what their engines look like."

"Yes, Your Majesty," Tip said. She stood and bowed, then hurried away.

Ibn Suleiman was waiting for her outside the door. "What happened?" he asked. "They wouldn't let me inside, and you were there for so long . . ."

She told him what had occurred with Lawton and the stolen papers, speaking so rapidly that several times he had to stop her and ask her to repeat herself.

"He called someone on a speaking tube, I bet, Lawton did, to tell them when to come and pick up the papers he stole—"

Ibn Suleiman was no longer listening. "He stole plans to make weapons, you said?" he asked. "And gave them to Spain?"

Tip nodded.

"They've wanted to conquer us for a long time," Ibn Suleiman said. "Nine hundred years, almost, ever since we first came here." He shook his head. "There's going to be war, I'm afraid. And this time, with all their weapons and money, they might win. They can buy mercenaries as easily as they bought knowledge. And if Japan comes in on their side—"

"Then what?"

"I don't know. We hear stories from people who've escaped from Léon, that they torture people, or burn them at the stake if they don't convert to Christianity."

"So? You'll be Christian then. What difference does it make?"

He looked at her, and for the first time she understood that he was frightened. She had never seen him afraid of anything, and it frightened her as well. "Well, it makes a difference to us," he said.

"But why?" Tip said, feeling the familiar frustration whenever she didn't understand something. "Why do you want to keep worshipping your moon god?"

"What? Where did you hear that? We pray to Allah, the one God, the same as you Christians do."

Tip hadn't worshipped anything in a long time, and she didn't think she believed in God. But Ibn Suleiman wasn't finished. "But it's more than just worship," he said. "It's—it's how we are here, our way of life. I told you. They'll burn our books, and then our people too, those who don't agree with them, Muslims and Jews—"

"What's a Jew?" Tip asked.

Ibn Suleiman looked at her in amazement. "They're people of another religion, another way of worshipping God. Do you truly have no Jews in England?"

Tip sighed with relief. From the talk of the man in the English delegation she had imagined some kind of monster, eight feet tall, with one horn and one eye.

Ibn Suleiman seemed to realize he had frightened her, though not the reason for it. "Don't worry—you'll be long gone by the time war starts. Your queen will order you back to England."

"I ain't going," Tip said. "There's things I have to learn here."

Ibn Suleiman shook his head. "It'll be far too dangerous. They'll want every man to fight, probably."

"I don't care. They can't make me go back. I'll hide somewhere—I'm good at hiding."

"What if Spain wins this war? They'll close down all our universities—you won't learn anything then."

"I don't care," she said again.

"Well." Ibn Suleiman stopped, then seemed to force himself to go on. "You can stay with us, I suppose, with my wife and me. We've never had children—I think I told you that."

"I can?" she asked. "Really?"

"Of course. I wouldn't say it otherwise."

Would he still take her if he knew she didn't believe in his religion, or any religion? And she had another confession to make, one far more important. "I—well, I ain't what I look like. I'm a girl. My name's Catherine."

Ibn Suleiman recoiled. She saw it, and somewhere inside her she recoiled too, against herself, against trusting someone when so many lessons had taught her not to....

"I should not have touched you, then," Ibn Suleiman said, looking away from her. "Men should not touch women before prayer."

She thought of the many times their hands had brushed, reaching for something. She said nothing.

"And our Prophet, peace be upon him, taught us that women should be modest. They should 'cast down their eyes, and guard their appetites . . .'"

"Is that what you want me to do? Cast down my eyes? How could I see to work then?"

"I don't know. You're not—you aren't like any woman I've ever met."

"What about that woman you told me about? The one you knew at the university?"

"She was brilliant, though."

"I'm brilliant too."

Ibn Suleiman laughed. "She did say that there would be more like her. That a country so busy with new inventions could not afford to ignore half the minds within it."

He fell silent. She knew his silences by now; he was thinking, working out a knoty problem.

"Well," he said finally. "The caliph wants us to study the homunculi outside the Hall of Records, is that what you told me? Let's go have a look."

What did that mean? Did he still want to adopt her? She would not go back to England, though. She would stay here and learn what she could. She would make him see how clever she was. "Only the men of understanding are mindful," he had said, and he understood more than anyone she had ever met.

"All right," she said, and they walked down the hallway together. ○

## MIDNIGHT RIOT

By Ben Aaronovitch

Del Rey, \$7.99 (mm)

ISBN: 078-0-345-5242506

Here's a fantasy/police procedural hybrid very much in the vein of Charles Stross's "Laundry" series or China Mieville's *Kraken*. On the strength of this debut novel, published in the U.K. as *Rivers of London*, Aaronovitch is a writer to keep an eye on.

The story begins when a London police officer guarding a murder scene, meets a ghost. Peter Gordon, a rookie constable doing street patrol while waiting to be assigned to a specialty, at first takes the ghost for a stray drunk, but soon realizes that he's talking to someone from a past era—who also happens to be a witness to the murder in the present. Even more incredible, the ghost gives him information that when Peter follows it up, leads him to an important breakthrough in the case.

As a result of his hitherto unsuspected ability to see and talk to ghosts, Peter finds himself assigned to a bureau he has never heard of—its purpose, the investigation of occult threats to the peace and safety of London. His new superior, Detective Chief Inspector Nightingale, turns out to be the last wizard in England. Peter has just been anointed his apprentice.

Peter now finds himself juggling his lessons in magic—which of course is much more demanding and takes longer to learn than he expected—with regular police work. The murder case he was investigating at the start has gotten more complicated, turning from an apparently isolated killing into what has all the earmarks of a serial murder case with occult elements. Meanwhile, Peter is trying to do his best to live the normal life of a young man in modern-day London, especially since one of his partners on the case is Leslie, an attractive young woman constable.

The occult aspect of the case involves a sort of possession; both the victims and their killers appear to be under a spell and neither aware of nor in control of their actions at the time of the murders. Worse, the possession has the thoroughly nasty effect of killing the killers, as well as their victims—their heads essentially explode. Nightingale and Peter follow up leads, bringing in conventional police where possible, but the solution to the case keeps eluding both the traditional and the special occult investigators.

There's plenty else to keep Peter busy, though. Nightingale introduces him to several water spirits—apparently there is an ongoing dispute between Father Thames, who rules the upper stretches of the river, and Mother Thames, who rules the tidal waters in the city. And Mother Thames has several daughters, one of whom seems to have taken a fancy to Peter. This of course brings in complications of its own, as Peter must learn how to negotiate with supernatural beings without falling into the many traps inherent in their nature.

Aaronovitch has a great deal of fun juxtaposing the up-to-date technology of modern police work and the stuffy old-fashioned mind set of Nightingale, who hasn't learned to use a cell phone; Peter suspects he may not even know how to use a land line. The alternating conflict and cooperation of the techie and magical worldviews creates a good bit of fun, and Aaronovitch works it nicely into the plot at several points.

Needless to say, the mystery is eventually solved. Along the way are entertaining bits of London lore, theater history, vignettes of a cop's daily routine, and clever twists on several familiar urban fantasy themes. Aaronovitch has a wry sense of humor that, to me at least, contributes to making most of his characters both likeable and convincingly realistic.

Best of all, Peter's career with the London police will continue at least one more chapter. Del Rey has acquired the sequel to this one, and announced its release a month after the first hits the streets in January 2011. It's called *Moon Over Soho*. Buy them both. You won't be sorry.

## FACTOTUM

By D. M. Cornish

Putnam, \$19.99 (hc)

ISBN: 978-0-399-24640-1

This is the concluding chapter in the adventures of Rossamund Bookchild, a young boy raised in a foundling home and trained to fight monsters in a world strongly reminiscent of Victorian England—as it might have been painted by Jack Vance.

Rossamund has been retained as a servant by Europe, an aristocratic woman who has made monster-hunting her career. She has taken him into her service largely because he is adept at mixing the complex potions she needs to keep up her strength and to stave off the side effects of the strange modifications her body has undergone to give her the powers to combat the monsters. She has done so despite an accusation, supported by considerable evidence, that Rossamund is not a human foundling, but a sort of monster that takes on human appearance. Even his name—which everyone has assumed is a girl's name given in some mix-up at the orphanage—is revealed by an old treatise on monsters to fit his purported origin.

Europe has rescued Rossamund from a group of corrupt officials. These officials took over the fortress where lamp-lighters are trained after Rossamund found evidence that the new commander of the fortress was winking at the creation of revermen—monsters stitched together from human parts—by his subordinates. Because of these discoveries, Rossamund has become a target—and it is clear that if the corrupt authorities can establish his monstrous nature, they will use the information to remove him as a threat. Europe transports her new factotum to Brandenbrass, her home city,

where Rossamund realizes that much of what he has learned about monsters is—as he already suspected—simply untrue.

The first revelation comes when, to escape pursuit by a gang of criminals, he takes a shortcut through the city's park—a wild place fenced off from human intruders. There he meets a prince of monsters—one with great powers, and who wants only to live without being bothered by humans and their parochial concerns. He returns home, where he learns that his enemies have petitioned the governor of the city, and his position may be perilous in spite of Europe's protection.

Europe responds by accepting assignments that will take her into the deep countryside, where her monster-fighting skills are in demand. Accompanied by Rossamund's two old masters from the orphanage where he was raised, they travel into strange lands, and encounter several new types of monsters. Just as they are returning to the city, they are set upon by a motley crew of humans and revermen. Rossamund and Europe fight off their enemies, with the help of several monsters Rossamund has befriended. After a period of recovery, they return to Brandenbrass to take on their enemies—and bring the story to a very satisfactory conclusion.

Cornish's "Foundling's Tale" trilogy is one of the most original large-scale fantasies in years. While it is aimed at young readers, it will be more than rewarding for many adult readers. Highly recommended.

## THE WAR THAT CAME EARLY:

WEST and EAST

by Harry Turtledove

Del Rey, \$27.00 (hc)

ISBN: 978-0-345-49184-8

Turtledove takes another excursion into alternate World War II, this time postulating that Neville Chamberlain's Munich appeasement of Hitler fell through and the war started in 1938, a year earlier than in our real history. That might seem a fairly minor readjustment, but Turtledove's imaginative resources are up to making a whole new saga out of it.

Turtledove tells his story through multiple viewpoints, a number of characters in different theaters of the war and on all sides. With the Spanish Civil War still being fought, Russia and Germany both fighting two-front wars, and Japan fighting in both Siberia and China, he has plenty of ammunition for a complex narrative with unexpected twists on familiar-seeming material. The various characters are drawn from a wide range of ethnic and national types, from American volunteers in Spain to a Jewish family trying to survive in a small German town, to Japanese infantrymen fighting in Siberia.

This book, the second in the series and sequel to *Hitler's War*, begins with the war several months past its opening salvos. Unlike our own history, Hitler and Stalin have not struck a deal; so the Germans are fighting a two-front war, in France and on the Russian-Polish border. Because of this, Germany's drive westward has stalled, with British and French resistance managing to stop the blitzkrieg before it swept them away. This creates a scenario that resembles the stalemated fronts of World War I rather than the actual WWII, in spite of the more advanced armor and aircraft in which several of the characters are shown fighting.

Turtledove's approach to big alternate histories has developed a kind of rhythm that his fans will find comfortable, moving slowly and carefully as he takes in the whole historic period from a wide variety of viewpoints. At the same time, he throws in an incredible amount of action, ranging from full-scale combat to day-to-day survival in grueling circumstances, with dollops of sex, humor, and allusions to obscure bits of lore thrown in for good measure.

As usual in Turtledove's larger works, the story breaks down into discrete scenes that jump from one theater to another to give a broad-scale picture of the progress of the war. The reader is kept waiting for the next episode in the adventures of any given character, and the various strands of the story move comparatively slowly, or in separate self-contained

episodes that don't entirely resolve some key plot question. In other hands this might be frustrating, but Turtledove has developed the technique to a fine art. Rather than frustrating, the rotation of scenes adds tension and anticipation, providing a satisfying pace to the story.

Turtledove has the knack for creating reasonably sympathetic characters—even those whose roles in the story most readers would find repellent. Thus we have a Stuka pilot, a Panzer driver, Soviet bomber pilots, and Japanese infantrymen sharing the stage with those we are more likely to see as "friendly" figures—an American woman stranded in Berlin, a Marine stationed in China, or the daughter of a Jewish family experiencing the initial stages of Nazi persecution. The subtlety in this approach is that he can gradually show characters changing—or being changed by circumstances.

The series of which this book is the second installment has an unknown number of volumes yet to come. But readers who pick it up at this point—and the first volume should still be easy to find—can be sure of a good number of entertaining twists to come.

**First Contact: Scientific Breakthroughs in the Hunt for Life Beyond Earth**  
by Marc Kaufman  
Simon & Schuster, \$26.00 (hc)  
ISBN: 978-1-4391-0900-7.

Kaufman, a science writer for the *Washington Post*, brings together information on a surprising range of researchers and theorists in the newly respectable field of astrobiology: the study of life as we don't know it.

The idea that life could exist on other worlds goes back at least as far as Giordano Bruno, the Italian priest burned for heresy in 1600, in part for arguing that God had created life on many worlds. That idea can be inferred from the scriptures of a number of other religions, including Judaism and Islam, and was considered by some of the Greek philosophers; it was only with the intellectual

ascendancy of Aristotle in European thought that it became anathema.

Now, scientists in a dozen fields are finding evidence that we may well have company in the universe—if not little green men or tentacled monsters seeking to carry off Earth's women, certainly something we might recognize as living and maybe even as intelligent. And in part because SF has contributed a good deal to making the idea respectable—well, maybe not *that* respectable—it is now taken seriously by mainstream science.

But, as Carl Sagan argued, the discovery of life beyond Earth would be so ground-shaking that claims of having found it require irrefutable proof. Kaufman documents some of the groundwork being laid that may, within reasonable time frames, help clinch that case.

He begins by looking at extremophiles—living creatures in environments that should be hostile to life. Bacteria have been found in South African gold mines, three miles below the surface, living in the very rocks. Life thrives in acid waters, in boiling water near volcanic outlets on the ocean floor, even in the arsenic-laden waters of Lake Mono, as recently reported. Life exists high in the stratosphere, where levels of radiation would kill most surface-dwelling organisms. It survives quite nicely in the Antarctic, where temperatures are well below freezing and conditions can be unimaginably dry. Can Mars be any more hostile?

In fact, the current evidence on Martian conditions suggests that our planetary neighbor may well have been quite a benign environment in the past. Meteorites of undeniably Martian origin have been examined, and several show what seems to be biological material. Unfortunately, the possibility of contamination after their arrival on Earth cannot be definitively eliminated.

But an even more intriguing possibility is that Martian life has already been detected. In one controversial experiment conducted by the Viking Mars lander in 1975, nutrients added to a soil sample appeared to spark the release of carbon

dioxide, which on Earth would be interpreted as biological activity. A consensus arose, however, that the release could be accounted for without the presence of life, and there has been no follow up. This was an understandable consequence given the difficulty of conducting research on the Martian surface. There remains a core of scientists convinced that the consensus is mistaken, and one day the question will get a better answer.

That controversy underscores the question of whether something that looks like life is in fact living (or was once living). Kaufman reviews and updates some of the research into the borderlands between life and nonlife, including the famous Miller-Urey experiment that created amino acids by shooting electrical sparks into what was at the time (1952) thought to be a good replica of Earth's primitive atmosphere. While the original experiment apparently has been shown to be flawed, some follow-up work has had equally intriguing results. Life in a test tube may be closer than most of us realize.

Critical to the possibility of extraterrestrial life is the location of environments where it could thrive. While a few in our own solar system (Mars, the Jovian moons) appear to hold promise, the bigger question is whether other stars harbor Earth-like planets that could support life. Preliminary data from the Kepler space telescope appears to give an overwhelmingly affirmative answer; still, some scientists continue to argue that life beyond Earth is likely to be rare, and intelligent life even rarer.

The search for evidence of intelligent life continues nonetheless. Classical SETI, using radio telescopes, has plenty of skeptics, but Kaufman points out that we have been conducting SETI experiments for about fifty years, a laughably short time in the cosmic scale. Our tools for the search are orders of magnitude better than when the Greenbank and Arecibo radio telescopes were state of the art. Here, as in other chapters, Kaufman talks to the scientists who are doing the current research and gives an

# CLASSIFIED MARKETPLACE

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up-to-date picture of what they're finding and thinking about.

One point where Kaufman or some of his trusted sources go off track, is in his endorsement of the idea that the parameters of physics show a kind of "fine tuning" without which life would be impossible. He repeats the observation that the universe we know would be impossible if, for example, the ratio of the weights of the proton and neutron were slightly different. Perhaps things could have been dif-

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ferent, or perhaps the universe we know is the only one that could exist; many apparently improbable phenomena turn out, with better information, to be utterly unremarkable. But short of some knowledge of how the cosmological constants are set, the question seems more appropriate for a sophomore bull session than for serious cosmological investigation.

On the whole, a fine summary of the current state of research into extraterrestrial life. Recommended. O

# SF CONVENTIONAL CALENDAR

The year's two main gaming conventions are coming up: Origins and GenCon, as well as the big ComiCon in San Diego. My picks are ApolloCon, ConVergence, WesterCon, ReaderCon (where I'll be) and LibertyCon. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con five months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard. —Erwin S. Strauss

## JUNE 2011

22-26—Origins. For info, write: 280 N. High #230, Columbus OH 43215. Or phone: (614) 255-4500 (10 am to 10 pm, not collect). (Web) [originsgames.com](http://originsgames.com). (E-mail) [custserv@gama.org](mailto:custserv@gama.org). Con will be held in: Columbus OH (if city omitted, same as in address) at the Convention Center. Guests will include: none announced at press time. One of the year's two big gaming conventions.

23-26—MidWestCon. (513) 922-3234. [cfg.org](http://cfg.org). Doubletree, Sharon (Cincinnati) OH. SF/fantasy relaxacon. Hang out by the pool.

23-26—PortCon. [portcomaine.com](http://portcomaine.com). Wyndham, South Portland ME. Anime and gaming.

24-26—ApolloCon. [apollocon.org](http://apollocon.org). Houston TX. Fan Guest of Honor: long-time fan Jeanne Gornoll; other guests TBA. SF and fantasy.

25—SF Hall of Fame Awards Weekend. [locusmag.com](http://locusmag.com). SF Hall of Fame, Seattle WA. Presentation of Locus Magazine annual awards.

30-July 3—ConVergence. (651) 647-3487. [convergence-con.org](http://convergence-con.org). Minneapolis MN. Keene, McGuire, L. M. Thomas, Tolin, Weisman.

## JULY 2011

1-3—ConTata. [contata.org](http://contata.org). Parsippany NJ. Jodi Miller, Tom Smith, Deb Wunder, Lord Landless. SF and fantasy folksinging.

1-4—WesterCon. [westercon64.org](http://westercon64.org). Fairmont, San Jose CA. Patricia A. McKillip, Phil & Kaja Foglio. Year's traditional western con.

1-4—GrangeCon. [grangecon.org](http://grangecon.org). Eden Resort, Lancaster PA. Another SF and fantasy relax-a-con. More hanging out by the pool.

8-10—Shore Leave, Box 6909, Towson MD 21285. (410) 701-0668. [shore-leave.com](http://shore-leave.com). Hunt Valley (near Baltimore) MD. Trek, etc.

8-10—Be-Con, c/o Box 91260, Columbus OH 43209. (614) 860-9737. Chad Vader. General geekery, open source software, & BACON!

8-11—No. American Discworld Con, c/o Box 259411, Madison WI 53725. (480) 945-6890. [nadwcon.com](http://nadwcon.com). Concourse. Terry Pratchett.

9-11—Ancient City Con, c/o 235 E. Coastline Dr., Jacksonville FL 32202. [ancientcitycon.com](http://ancientcitycon.com). Jacksonville FL.

14-17—ReaderCon, Box 65, Watertown MA 02471. [readercon.org](http://readercon.org). Marriott, Burlington (Boston) MA. Geoff Ryman, Gardner Dozois.

15-17—LibertyCon, Box 695, Hixson TN 37343. (423) 842-4383. [libertycon.org](http://libertycon.org). Near Chattanooga TN. Stirling, Mather, Steele.

15-17—Tokyo in Tulsa. [tokyointulsa.com](http://tokyointulsa.com). Tulsa OK. Anime and related media.

15-17—Al-kon. [al-kon.org](http://al-kon.org). Convention Centre, Winnipeg MB. Monica Rial, Greg Ayres, Chris Ayres, Kirby Morrow. Anime.

21-24—ComicCon. [comic-con.org](http://comic-con.org). San Diego CA. 30,000+ expected. National media coverage. Celebrities helicopter in to beat traffic.

22-24—FandomFest. [fandomfest.com](http://fandomfest.com). Louisville KY. SF, horror, fantasy, popular media.

23—FantSci, c/o 298 Cedar Rd., Chesapeake VA 23222. (757) 410-7147. [fantasciconvention.com](http://fantasciconvention.com). Central Library. Art of SF.

29-31—PulpFest, c/o Cullers, 1272 Cheatham Way, Bellbrook OH 45305. [pulpfest.com](http://pulpfest.com). Ramada, Columbus OH. Pulp magazines.

## AUGUST 2011

4-7—GenCon. [gencon.com](http://gencon.com). Indiana Convention Center, Indianapolis IN. This and Origins are the two big gaming cons of the year.

5-7—MuseCon. [musecon.org](http://musecon.org). Westin, Itasca (near Chicago) IL. S. J. Tucker. "Music, blinkies, and all forms of creativity."

5-7—Fandomium, c/o Box 701, Middleton ID 83644. [fandomium.org](http://fandomium.org). Nampa ID. Brothers Thir13en, Lynn Hardy, Jason Wills.

12-14—AniMinCon, Gallery for Digital Art, 138 Sullivan, New York NY 10012. (212) 228-2810. [animiniconsoho.com](http://animiniconsoho.com). Anime.

17-21—RenoVation, Box 13278, Portland OR 97213. [renovationsforg.org](http://renovationsforg.org). Reno NV. Asher, C. Brown (I. M.), Powers. WorldCon. \$195.

26-28—ArmadilloCon, Box 27277, Austin TX 78755. [fact.org](http://fact.org). Renaissance Hotel. Bacigalupi, Lou Anders (of Pyr), M. Finn, Duarte.

26-28—BuboniCon, Box 37257, Albuquerque NM 87176. [bubonicon.com](http://bubonicon.com). Airport Sheraton. Stephen Leigh, S. L. Farrell, J. Picacio.

26-28—ConText, Box 163391, Columbus OH 43216. [contextsf.org](http://contextsf.org). Doubletree, Worthington OH. SF & related games, comics & films.

## AUGUST 2012

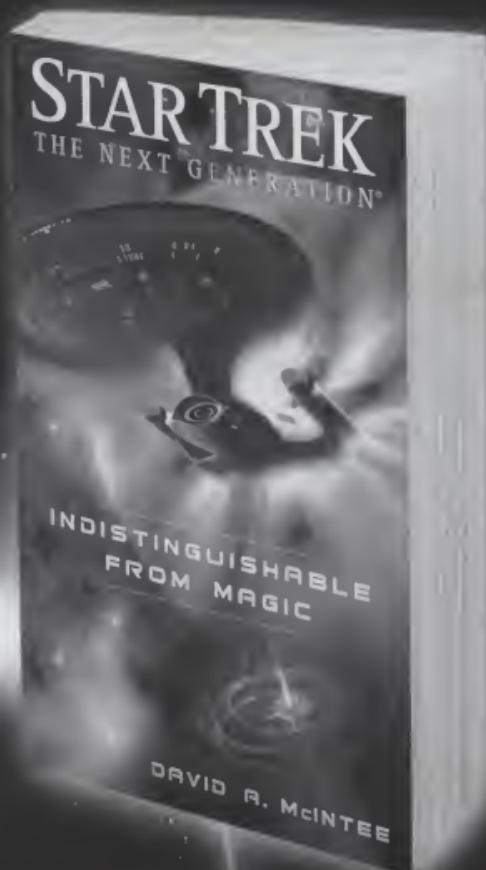
30-Sep. 3—Chicon 7, Box 13, Skokie IL 60076. [chicon.org](http://chicon.org). Chicago IL. Resnick, Morill, Musgrave, Scalzi. WorldCon. \$155+.

## AUGUST 2013

29-Sep. 2—Texas In 2013, Box 27277, Austin TX 78755. [texas2013.org](http://texas2013.org). San Antonio TX. Bid for WorldCon. Dates estimated.

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